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A

VIEW

OF THE

ELEMENTARY PRINCIPLES

OF

EDUCATION,

FOUNDED ON THE

STUDY OF THE NATURE OF MAN.

BY

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PREFACE.

THE most important point in Anthropology, or the study of Man, is to acquire a knowledge of his Nature; and the next, to discover the mode in which his physical and mental constitution may be most advantageously improved. Men of eminent talents have considered the principles of education worthy of their attention; and many works have been already published on this subject. It may therefore be asked, Why should another be presented? Because education is still conducted in a manner very different from that in which it ought to be. Mankind has improved less than we could wish. "There are many books," says HELVETIUS, "many schools,

but few persons of understanding; there are many maxims, but they are seldom applied; man is old, but still a child." New elucidations of this subject, therefore, are still wanting; and I hope I shall be able to suggest some new ideas upon it. As, however, many ancient and modern philosophers have examined this subject, several of my ideas may be found in other writings; but nowhere are they reduced to the principles which I have adopted, and arranged in the same order. I hope also to succeed in pointing out some new objects, interesting in themselves, and leading to important results.

This, no doubt, will produce opposition. I am also aware of the active influence of prejudice,—of old habits and selfish passions ; but nothing shall deter me from communicating what appears to me to be founded on the immutable laws of the CREATOR. His authority is the only one I acknowledge in natural history. Truth is independent of time; it must prevail, though it excite the hatred of the ignorant, the weak, and the jealous.

The reader is requested to bear in mind, that the language in which this treatise is composed, is to the Author a foreign one. A person so situated is not

always a competent judge of the nicer shades of meaning attaching to the expressions which he employs; and from this circumstance, together with the difficulty of commanding words to convey his ideas properly, he is liable to be betrayed into a tone of abrupt and apparently authoritative writing, quite foreign to his wish and intention. To these causes the reader is requested to impute any thing in the manner of the following pages, which may appear not suited to the circumstances or the subject.

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ELEMENTARY

PRINCIPLES OF EDUCATION.

GENERAL VIEW.

The preliminary points to be considered in this general view are, 1. The definition of the word Education; 2. The perfectibility of mankind; 3. The little success which has hitherto attended Education; 4. The singleness of the human species;—and, 5. The usefulness of Education.

As to the definition of Education, I think it necessary to state, that I intend to introduce in this volume several topics which are not generally considered as falling under Education in the common acceptation of the word, merely denoting instruction in literature and accomplishments; I use this term as embracing every means which can be made to act upon the vegetative, affective, and intellectual constitution of man,

for the purpose of improving this his threefold nature.

Being asked what I mean by human nature? I reply, that it is not body alone, nor mind alone, nor animal propensities, affections, or passions; nor moral feelings, nor intellect; neither is it organization in general, nor any system of the body, nor any particularity whatever;—but human nature, in the proper sense of the words, comprehends all the observable phenomena of life, from the moment of conception to that of death, both in the healthy and diseased state; or, in short, all the manifestations both of the body and mind.

The next introductory point to be elucidated is, whether human nature is susceptible of perfection or degradation.

In speaking of the susceptibility of being perfected, it is not to be understood that man may lose one faculty and acquire another; for the fundamental nature of man being unchangeable in body as well as in the faculties of the mind, such an event is impossible on earth. The meaning of the proposition, therefore, can only be, whether certain powers are capable of attaining greater or less activity;—whether some of them may prevail over others; and, whether the mutual influence of the faculties and their actions may be regulated and well conducted.

In this latter signification alone, the answer is affirmative. Such a perfectibility exists in all living beings. Certain qualities of plants, for instance, may be strengthened, increased, weakened, or diminished. Fruit trees may be modified as to their growth or fruit, their produce. Each part of the bodies of animals is subject to great variations. Animals, also, are not confined to actions which their preservation requires. They modify their conduct according to the situation in which they may be placed; hence they are susceptible of a kind of education beyond their wants. Monkeys, dogs, horses, bears, &c. can be instructed to play various tricks. They have also a recollection of what has happened to them, and modify their conduct accordingly. An old fox which has escaped several snares, and knows that he is watched, takes greater precautions, and proceeds with more slyness, when he approaches the habitations of man, with a view of stealing poultry. A bird whose nest has been destroyed in a frequented place, conceives the necessity of placing it in future in a more retired situation; and the construction of the second nest is also more solid and more perfect than that of the first. A dog resists its instinct to run after a hare, because it recollects the beating it has previously received on that account. The horse avoids the stone at which it once has stumbled. There are even facts on record of learned pigs and learned canary birds. Similar examples are within the

knowledge of every one, and it is therefore unnecessary to multiply them. Yet this power of modifying their actions is not unbounded in animals, but limited according to their nature. Pigeons and hares, for instance, can never be taught to hunt like falcons and dogs.

Man offers similar appearances. The various modifications to which his body is liable, are known. The manifestations of the mind also vary in different persons, even in whole nations. Yet, as far as history informs us, mankind has always been essentially the same. The only difference, observed at different times, has been, that the manifestations of the special powers have been more or less active, modified, and variously employed.

The next question is, Whether man, with respect to his feelings and intellect, has improved or degenerated. By some authors mankind is said to have arrived at a greater state of perfection than it originally enjoyed; while others lament its progressive degeneracy. The improvement or degeneracy of the human race, in regard to a knowledge of the external world, the practice of the fine arts, and moral conduct, are particularly to be examined. A detailed elucidation of these points would require a whole volume: it is my intention only to take a general view of them.

It is superfluous to mention, that the moderns enjoy a great superiority over the ancients with respect to every branch of natural history and natural philosophy. The Baconian and true method of studying Nature, founded on observation and induction, has been recently discovered and introduced. It has forwarded every kind of positive knowledge in an astonishing degree. It has, however, been unfortunately neglected in the study of man, and hence his nature is but little known. (It is true, whatever it was in the power of man's reasoning faculties, unaided by observation, to discover, was discovered by the ancient philosophers.) But the knowledge of man remained extremely vague and uncertain, and Phrenology alone will supply this defect, and reduce Anthropology to invariable principles.

In the fine arts of imitation modern artists find it difficult to surpass the ancient masters, yet they seem to be wrong in confining themselves to mere imitation of ancient productions; nature always remains the best model, inexhaustible in her modifications, whilst by the former proceeding the arts degenerate, or their improvement, at least, is impeded.

The arts of industry have undoubtedly improved, and political economy may be considered as a science of modern days. The state of mankind at large is evidently better than in ancient

times and during the ages of darkness, and it will still improve in proportion as ignorance and immorality are removed, and the laws of the Creator attended to.

The improvement or degeneracy of man, as regards his moral and religious opinions, presents a particular interest, even with respect to his worldly happiness. Both these sorts of notions vary according to the different states of civilization, and they are, by no means, stationary, any more than the functions of every other faculty.

Savages commonly believe in polytheism, and generally consider all Superior Beings as malevolent, and worship them through fear. People in a more cultivated state admit Superior Beings of a mixed nature, like men. The gods of the Greeks, for instance, were supposed to be endowed with all human feelings; they required food and sleep. Jupiter himself was not free from the human frailties: he was jealous, often cruel and implacable. He had overturned every thing in heaven, and reduced the other gods to be his slaves. The gods of the Romans were not more noble. They were mercenary, and could be bribed by fine temples, games, and more acceptable sacrifices. People of little instruction divided the invisible beings into benevolent and malevolent. Others admitted two principles; one benevolent, the other malevolent; and they acknow-

ledged also many inferior deities, as emanations from the primitive ones. Persons of more cultivated minds believed in one supreme benevolent deity; and in inferior spirits, some benevolent, others malevolent. The most enlightened acknowledged only one Supreme Being, boundless in perfection, and the maker of every creature.

The mode of worship deserves equally a peculiar consideration in the history of mankind. It is always conformable to the notions entertained of the nature of the Deity. In order to avert the wrath of the malevolent powers, and to please them, men have made themselves as miserable as possible, by mortifications, flagellations, painful labors, sacred victims, human sacrifices, and suicides. To gain the favor of manlike gods, sweet-smelling herbs, burning incense, oblations, gifts, agreeable impressions on the senses, ceremonies which illustrate a prince at his court, and various sorts of formalities, have been employed.

If we compare the absurdities of Paganism, or even the imperfect doctrines of Judaism, with the purity and sublime principles of true Christianity, we shall perceive that the latter are greatly superior. The Old and New Testament attribute very different qualities to the Supreme Being, and their moral precepts are very different. The old dispensation may be viewed as accommodated to the Jews, who were a hardhearted, stiffnecked, stubborn race.

The God of Israel was jealous, revengeful, terrible, and a God of war. He was fond of perfume, ornaments, ceremonies, burning incense, even of bloody sacrifices. He commanded his people to destroy those who forsook him, or who did not obey his commandments; even those who kindled fire on the sabbath day. Neither brother, sister, son, daughter, husband, wife nor friend, was to be spared, if he served another god. He who knew an infidel, was forbidden to pity, conceal or save him; on the contrary, it was his duty to stone him. (Exod. xxxv. Deuteronomy xiii.)

The God of Christians, on the contrary, is love, benevolence and charity. He is the Father of the whole of mankind, and wishes for universal happiness. He freely pardons, provided the sinner repent. He gives the same laws to all, makes no exception, and pays no attention to the appearance of persons; he judges, punishes, or rewards every one after his actions. He is a Spirit that cannot be confined to temples, and is to be adored in spirit and in truth. (John iv. Rom. ii. 1 John iv. Matt. vi. &c.)

The Jews were obliged to be faithful only to those of their own race; they were permitted to take usury from foreigners, and to hate them. David praised God in saying, "Do I not hate those who hate thee? I hate them with perfect hatred." (Ps. cxxxviii.) They were ordered to

form a separate nation, and prohibited from intermarrying with other people. Their food was prescribed; many things were inderdicted and declared impure. Polygamy was lawful. Solomon had seven hundred wives and three hundred concubines. The husband was allowed to put away his wife; it was sufficient to write her a bill of divorcement, &c. &c.)

(How superior and more noble are the principles of Christianity: they prohibit anger, hatred and revenge, and order us not to return evil for evil; they command forgiveness of every offence seven times in a day, and seventy times seven, if asked for; to love our enemies; to bless them that curse us, and to do good to them that hate us. They interdict all selfish passions, and declare our neighbor every one who does the will of God. CHRIST asked to drink of a woman of Samaria, whilst the Jews had no dealings with that nation. He associated with Jews and Gentiles, ate with publicans and sinners, and declared those only who do the will of his heavenly Father, to be his mother, sister or brother.)

(No food is an abomination to Christians. CHRIST said, "Not that which enters into the mouth defiles a man;" and St. PAUL declares to the Romans, "I know and am persuaded by the Lord JESUS, that there is nothing unclean in itself.") CHRIST permitted only one wife, and

in this respect re-established the law as it was from the beginning of the creation. (Mark x. 6.)

Before the Christian dispensation, empires were founded by the sword, and by the most cruel and frightful destruction of the vanquished.

Christ declared, that he came, not to destroy men's lives, but to save them; that he who exalts himself shall be abased. He made no distinction among persons, and considered love and peace as the aim of all commandments. He only *proposed* the doctrine of his heavenly Father for the acceptance of mankind, and did not enforce it by the sword. He directed his disciples only to shake off the dust of their feet in departing out of that house or city where they had not been courteously received, or where their words had not been attended to.

The superiority of the Christian principles above the Jewish law is evident. St. Paul said to the Hebrews (iii.), that "Christ is more worthy than Moses;" and (vii. 20.) "by so much was Christ made a surety of a better Testament;" and, (viii. 7.) "if the first Covenant had been faultless, then should no place have been found for the second." True Christianity really improves the moral and religious character of a Jew.

In regard to morality, it is indeed impossible to establish better principles than have been pointed out in the new Testament. But since these rules, unexampled in ancient legislation, have been established, the followers of Christianity have often fallen back to many of the contemptible doctrines of the heathen. Many points of importance have been neglected, and trifles adhered to. Pretended Christians, for instance, have disputed, whether it be permitted or not, to eat meat on certain days, in the same manner as Mahomedans dispute, whether coffee be or be not prohibited in the Koran. Notwithstanding these abuses, however, it is certain, that the precepts of moral and religious conduct have improved by degrees; and that many selfish and absurd opinions will be rectified, as soon as human nature shall be better understood. True Christianity will gain, by every step which is made in the knowledge of man.

Let us now see whether Education is advanced as much as may be desirable. Unfortunately we find, that notwithstanding the sublime principles of Christian morality, and the numerous masterpieces of arts and sciences, it is a lamentable truth, that hitherto education has succeeded less than the friends of humanity wish for. Indeed, if we examine its influence on the improvement of mankind, a thousand years is like a day that is past. Who has not seen children of the most pious and

exemplary parents indulge in scepticism, and plunge themselves into profanity and vice? And who has not observed that licentiousness often prevails in the most enlightened and refined classes of society? Who has not observed very limited talents appear in the offspring of men of the greatest genius? Now the inferences to be drawn from such facts are, that either the education has not been adapted to the natural dispositions of those individuals, or that every one is not capable of receiving the full effect of a good education; and as man in general hitherto has little improved by education, we must conclude that either he is less perfectible than we may wish for, or that the true means of improvement have not been employed. The latter cause seems to me the most probable, and it may be principally accounted for by our ignorance of the nature of man. Plants and animals succeed only if treated according to their natural qualities, and the education of man will not and cannot succeed without adapting it to his nature.

Some philosophers have endeavored to degrade man to a level with the brute; while others have fancied that he has nothing whatever in common with the animal kingdom. By some the faculties of man are considered as the result of external impressions and accidental circumstances; while others believe that the existence of each person, and all the phenomena of that existence, are the effects of predestination.

I shall mention a few particulars concerning the great error, according to which the champions of education consider new-born children as blank paper, on which they can mark every impression. But, under such a supposition, why are children of the same family so different? Why can teachers not communicate their own talents to every pupil? Why cannot every one, who understands the masterpieces of genius, produce similar effects? Why is not every poet a HOMER,—every musician a HANDEL, a MOZART, a HAYDN,—every historian a TACITUS,—every speaker a DEMOSTHENES,—every painter a RAPHAEL? The rules which lead to perfection being pointed out, it would be easy for every one to put them into practice, if no innate powers were necessary. Experience, then, forces us to decide entirely against such speculative assertions; those who have been engaged in conducting education are convinced that they are incapable of producing those talents and feelings in children which they could wish; and those who assert the contrary, maintain only dreams, and instead of observing nature, indulge in their fancy.

Many defenders of education wish to persuade us, that the first impressions in early age determine the direction of the mind. I do not deny their influence, but it is less than it is generally supposed to be. Children, in their early years, are almost exclusively intrusted to the care of females, yet boys and girls show from the earliest

infancy their distinctive characters; and this difference between the sexes continues through life. A marked variety of tempers and capacities may be observed in children, as soon as they are susceptible of any impression. Children, like adult persons, are differently affected by the same external circumstances. Impressions, also, it is to be observed, are more or less permanent. How often, in the maturity of age, when the activity of the mind is the greatest, does it happen, that we are at one time perfectly acquainted with a subject, but afterwards forget it, as if we had never known it? How, then, is it possible to believe, that individual impressions, received at a period when the mind is almost inactive, determine the character or the mental capacities of a child for his whole life? On the other hand, it is well known, that many individuals turn out very different from what they appeared at an earlier period of life. It must therefore be allowed, that the above mentioned opinion is destitute of all support from experience.

I do not hesitate to maintain, that education must fail, as long as we continue to think that children are born alike, and may receive, with equal advantage, every kind of education. If J. J. Rousseau had taken care of his children instead of sending them to the public hospital, he would have detected his erroneous conceptions: he would have observed, that Nature implants certain kinds

of feeling; that education only weakens, or invigorates and refines them; that children react on external circumstances, according to their natural dispositions; and that it is necessary to adapt education to the nature of individuals. Hence, the first thing to be done, is to trace back the faculties of children to their origin. Such a knowledge will contribute to the advancement of arts and sciences, and to the improvement of moral conduct, by suggesting suitable means for directing the energies of children to the objects which they are most fitted by nature to attain. "There are few subjects," says DUGALD STEWART, "more hackneyed than that of education, and yet there is none upon which the opinions of the world are still more divided. Nor is this surprising; for most of those who have speculated concerning it, have confined their attention chiefly to incidental questions about the comparative advantage of public or private instruction, the utility of peculiar language or sciences, without attempting a previous examination of those faculties and principles of the mind, which it is the great object of education to improve."—(Elements of the Philosophy of the Human Mind, p. 62.)

Another great error in education, also founded on our ignorance of the human nature, is, that every teacher takes himself as a model for his pupils. What he likes and learns with facility, he supposes ought to be equally liked and learned

by every other person; while in every child, the feelings and intellectual faculties, though essentially the same, are modified in quantity and quality. Hitherto, on account of none of the systems of education being founded on a correct analysis of the faculties of man, education has been conducted altogether in a general way; and hence almost every individual who thinks for himself when arrived at the age of maturity, has found it necessary to begin a new course of education, according to his individual character and talents.

Still another point, hitherto not sufficiently understood in education, concerns the organic conditions on which the manifestations of the mind depend. This is the object of a new doctrine, and is detailed in my work on Phrenology, Vol. I.

Education, though it does not create any power whatever, may produce great effect; but to that purpose its whole system must be changed, and this will be done in proportion as the nature of man becomes known, and as it will be acknowledged that man must be perfected like other created beings. He is the disciple of nature, and must submit to the determined sway which prevails in her government. He errs the moment he ceases to observe, and begins to excogitate. The construction of a system of education cannot be a creative but an imitative process, which must be founded only on the lessons of experience. Here, as

in the cultivation of every other science, it is not by the exercise of a sublime and speculative ingenuity, that man arrives at truth, but it is by letting himself down to simple observation,—by rejecting equally the authority of antiquity, and of eminent contemporaries, when in opposition to nature;—by sacrificing every consideration that opposes the evidence of observation, and its legitimate and well established conclusions;—by being able to renounce all the favorite opinions of infancy, the moment that truth demands the sacrifice; —in short, by following only the lights of observation and induction. "Does not our happiness depend," says a contemporary writer, "on the knowledge of the various relations which man bears to his fellow man and to his God, and the practice of the duties which they impose; and how are we to discover these relations, except by the assistance of reason, operating on experience? Can false views of human nature, and its attributes, increase the happiness of the human race individually; or can political society, framed on such erroneous principles, attain the end for which alone society was framed? 'Deception and mendacity are always regarded in the common and every day intercourse of life as base and odious,—Is it then only upon subjects of the highest importance to man, that he may be deceived without danger or detestation?'" (Retrospective Review, No. I. p. 71.) I concur entirely in these sentiments.

My ideas on the nature of man, on his fundamental powers ; on their innateness ; on the conditions of their manifestations in this life ; on the moral liberty, and several other points, are exposed, with details, in works entitled, Physiological and Philosophical Principles of Phrenology. I suppose these points to be known to those who take up this volume, composed merely with phrenological views, and founded on mere phrenological principles.

In treating of Education and Legislation, it seems important to examine, Whether there is only one species of the human race, or whether there are several ? The great variety of bodily and mental appearances ;—of features, complexion, size and configuration ;—of feelings and intellectual powers,—must strike the most superficial observer. The causes of these differences have been examined, and various hypotheses have been invented to account for them. Some authors have had recourse to different original species ; others have accounted for these modifications, by the common laws of nature. It is indeed natural to ask, Whether a Negro and a White Man, a Dwarf and a Giant, a Hottentot and Lord Bacon, are of the same species ? Whether the Cannibal, whose earthly and expected heavenly pleasures are gratifications of the low animal passions, and the true Christian, full of kindness and benignity ;

whether he whose ingenuity is exercised merely in destruction and devastation, and he who beholds all creatures as objects of Divine providence and beneficence, were originally formed after the same image ?

If there be several species of Man, there can be no universal principles of human conduct ;—human nature cannot be included in any one system ; and the rules which are suitable for one nation will not be fit for another. If, on the contrary, there be only one species ;—general principles of education, general rules of conduct, and national laws, may be established. Moreover, if there were several species, and one superior to the others, the White to the Negro, for example, slavery might be contended for as an institution of Nature ; but if the species be only one, neither the primitive moral character, nor Christianity, can excuse this most selfish of all barbarities.

I will not consider the arguments of those who, from inferior motives without any respect for human dignity, and without any religious or moral principles, or reproaches of conscience, force other people to become the mere instruments of their selfish gratification. I shall examine only the reasons which natural history offers in support of the one or other opinion : that the human race consists of one species or of several. These reasons may be drawn from the external qualities of

the body, such as size, configuration and complexion ; its internal structure ; the laws of propagation ; and the manifestations of the mind.

In the elucidation of this important object, it is not sufficient to examine the external qualities alone. Such a proceeding is like that of LINNÆUS, who classed the animals according to their external appearances, and not according to their nature ; or like that of a librarian who should class books according to their shape, size or binding, without regard to their contents.

Man is found in all climates; and hence some philosophers have inferred that there are several species of man. These philosophers reasoned by analogy, stating, that each climate has its own species of men in the same way as plants and animals are adapted to hot, temperate and frigid regions. Plants which grow in the torrid zone, perish in a cold climate, and those which flourish upon mountains decay on being removed to a plain. The rein-deer, say they, is confined to the frozen region, and the white bear cannot live in a southern climate ; while the elephant, rhinoceros, and many other animals, do not prosper in the frigid zone. Hence Nature has destined and fitted different beings for different climates, and she has guarded them against the natural vicissitudes of the seasons. To this end, in cold countries, animals are protected with more fat, and

thicker hair. The same rule explains why plants and animals lose their qualities when removed from their native climate; and why, in several countries, the stock requires to be continually renewed. In northern countries, for instance, flax degenerates, and a quantity of seed is annually imported from southern regions. In the same way, to preserve, in some degree of perfection, the breed of Arabian and Barbary horses, frequent supplies from their original climates are requisite.

Lord KAMES, (Sketches of the History of Man, vol. I.) one of the principal champions of the opinion that there are different species of man, insists much on observations of this kind, and thinks them conclusive. He supports his assertions, by observing, that men, in changing climate, usually fall sick, and often run the risk of losing their lives. This argument, however, is not decisive. The plants and animals adapted to different climates, are evidently of different species. This is not the case with the varieties of men. Moreover, as plants and animals can by no means alter or regulate the effect of external influences upon themselves, it is conceivable that peculiar species, fitted for every climate, should be created. Man, on the contrary, is able to remove obstacles, to overcome difficulties, and to modify, in a high degree, the effect of external circumstances upon his nature. On the other hand, the argument of

analogy is not even general; for several animals, such as pigs, dogs, and others, follow man, and, sheltered by him, live in all climates.

It is certain that great changes of climate produce diseases. We must observe, however, that it is not a great difference of climate alone that produces this effect, but that all sudden changes of season, weather, situation, and mode of living, also expose us to the loss of health. In America, says the Reverend Dr. SMITH, ("On the Varieties of Men," p. 119.) "we are liable to disorders by removing incautiously from a northern to a southern State; but it would be absurd to conclude, that the top of every hill, and the bank of every river, is therefore inhabited by a different species, because in the one we enjoy less health than in the other. The constitution becomes attempered in a degree even to an unhealthy region, and then it feels augmented symptoms of disorder on returning to the most salubrious air and water; but does this prove that Nature never intended such men to drink clear water, or to breathe in a pure atmosphere?" It may be added, that there are diseases of professions as well as of climates. Shall we maintain, therefore, that there is a species of man for every profession? Captain COOK, Captain KRUSENSTERN, and other navigators, have proved, that, with sufficient care, man can bear great changes of air, temperature, season and weather. They have preserved the health of their

crews in long voyages, and in the most dissimilar climates. The human constitution is known, from positive observation, to become in time assimilated to every climate; and the offspring of foreigners, at length endure, like the aborigines, the external influence without injury. Thus, the argument that sudden changes of climate have a tendency to produce diseases, or even death, does not prove that there are several species of man.

The Reverend Dr. Smith has clearly shown, from another argument, quoted from Lord Kames, that the latter was too credulous; that he was deceived by erroneous reports of superficial observers; and that he did not sufficiently understand the pliancy of the human constitution, which enables it to adapt itself to every climate, and to all external circumstances. The last remark that Lord Kames makes, is a striking example against his own assertion. He says, that "the Portuguese colony on the coast of Congo, has in course of time degenerated so much, that they scarcely retain the appearance of men." Another assertion of his, is a complete specimen of his credulity. He is of opinion that the Giagas, a nation in Africa, could not have descended from the same original with the rest of mankind, because, unlike to others, they are void of natural affection; kill all their own children as soon as they are born, and supply their places with youths stolen from neighboring tribes. Common sense, however,

would answer, that if such a species were created, it could not continue longer than the primitive stock endured. The stolen youth would resemble their parents, not those who adopted them, and would soon be the sole constituents of the nation. Yet Lord KAMES thought that the Giagas formed a peculiar species, who continued from generation to generation to kill their children!

All organized beings are modified by external influences, though their primitive nature is never changed. There is certainly no reason to believe that every kind of apple, pear, or other fruit-tree which we see in our gardens, has been the subject of a distinct creation, these varieties being produced by degrees. The specific character, however, is constantly the same; and one tree can never be changed into another,—an apple-tree, for instance, into a pear-tree.

The same law of modification prevails among animals. Their size, color, and other qualities, are very different in different climates. There are varieties of horses eight times smaller than other races. Some goats have no horns; others have several. The pigs, also, of Scotland, Ireland, and Hungary, are very different, but it would be irrational to admit as many primitive species of these animals as there are varieties. Their specific character is always the same, and a pig can never be changed into a sheep.

As the body of man is subjected to the general laws of organization, why should it also not undergo considerable changes, and present great differences of appearance ? This matter, on account of its importance, deserves to be examined more at large.

One of the most striking differences perceptible in the human race, as well as in animals, is to be found in the skin and hair, which are in the most intimate relation with each other, and indeed receive their nourishment from the same blood-vessels. They vary in thickness and color, and evidently depend on climate. The ermine and weasel change the color of their hair in summer and winter. The fur of wild animals grows thicker in cold weather, while under the heat of the torrid zone, the hair is coarse.

Among horses, oxen, rabbits, and other animals, some individuals of the same species are brown, black, or white, and why should it be thought absurd that there should be also variously colored men ? The only difference in this respect betwixt man and animals, seems to be, that man resists longer the influence of external circumstances, and that his skin requires a greater difference of climate to change its color. It is a fact, however, that heat and extreme cold thicken the skin of man and darken his color. We might naturally expect, what is indeed the case, that changes of

the skin produced by climate, should take effect in a longer or a shorter time, according to the different degrees of civilization ; for example, savages being exposed to the influence of climate, suffer its full force ; while civilized nations obviate, or even greatly prevent its influence.

Among the physical qualities of man, complexion is the most easily changed. The Portuguese in Africa are become black, but they have preserved their original configuration. The Jews in northern countries are fair ; they become brown and tawney towards the south, but their configuration does not undergo proportionate changes.

It seems difficult to say whether the original color of man was white or black ; but it is certain that white people grow black sooner than negroes become white.

On the other hand, difference of size and form does not prove the existence of several species of man, more than that of several animals which vary greatly in this respect. The swine carried from Europe to Cuba acquires double its original magnitude. It is the same with the oxen in Paraguay. Climate, diet, and the manner of living, may produce such differences. Young animals of the same litter, treated with care, or neglected, well fed or reduced to starvation, will be quite different in shape and size. Children, when neg-

lected, are emaciated, sallow, and their features coarse and meagre. The poor, exposed to excessive hardships, are apt to become deformed, and diminutive in their persons; whilst luxury and excess also tend to debilitate and disfigure the human constitution.

Determinate feelings, too, when permanent and habitual, change the countenance and external appearance.

The most effectual means of producing differences, and of preserving those which exist, is propagation; and on this subject I shall hereafter enter more into detail.

Thus, the external differences of mankind may be explained by known natural causes, and are no proofs that there are several original species. A sound philosophy never assigns without necessity, different causes for similar effects. Small influences, acting constantly, will necessarily produce, in time, conspicuous changes in mankind; just as a succession of drops of water falling on the hardest rock makes a cavity. The first alteration in the external appearance of man is observed in the countenance, the next in the complexion, and the last in the size and configuration.

It may be added, that man may live every where, the flexibility of his body supporting dif-

ferent impressions;—moreover, no obstacle, neither river nor sea, prevents him from continuing his excursions;—he transports with him animals and vegetables, and prepares by art what he cannot use in the natural state; and he knows how to shelter himself and other useful beings against noxious influences from without.

The internal structure of the body of man, also indicates that there is only one species. To prove that there are several, it would be necessary to show that the number of the essential parts is not the same in all; that Europeans, for instance, possess certain parts which Negroes have not. Whoever could demonstrate, that one part of the brain in Europeans is wanting in Negroes, would prove that there is a natural difference between them; I hope during my stay in the United States, to be able to examine the brains of Negroes and to ascertain that the same essential parts exist in them, subject, merely, to modifications, as it is the case in different individuals of the white race.

Another argument to prove that there is only one species of Man, may be founded on the manifestations of the mind. Every where, and at all times, the same primitive faculties, however modified the actions flowing from them may be, are to be observed. Negroes, in general, are inferior to Europeans; yet some of the former excel in music, mathematics, and philosophy. BLUMENBACH

(Goetting. Magazine, t. iv. p. 421.) and Bishop Gregory have collected the names of Negroes famous for their talents. Herder and Raynal, in various passages of their works, quote instances of extraordinary virtue and morality observed among savages and barbarous nations.

It has been reported, that there are nations without religious feelings; but more exact investigation has shown, that religious ceremonies existed, but had been mistaken for mere social amusements, such as dancing, singing, and fighting. It has frequently happened, that descriptions of savage nations have been given by travellers, who neither knew their language, nor the signification of their manners and customs. Almost all reports of this kind are founded on single observations. How erroneous, therefore, must they be, and how little to be relied on, particularly when they describe the customs of nations hostile to strangers. It is known, that savages frequently steal from foreigners, while they continue faithful to each other, like several criminals in Europe, who show great attachment and justice towards each other, and rather suffer the greatest torments than betray their companions and friends, but who do not spare either the goods or the lives of other individuals. If a traveller, accustomed to the most brilliant ceremonies of religion, were to meet with a sect of the followers of Confucius, who have neither temple nor priests, nor any form of

external worship ; who adore the Supreme Being in mere inward contemplation, and in the practice of moral virtue, and he had no direct means of communication with them, might he not easily be led to think, that they professed no religion whatever ? Hence, it is important to distinguish betwixt the faculties themselves and their application. Attachment, for instance, may act with respect to our native country,—to our friends,—to animals,—or to other objects,—yet the primitive impulse is the same in all these instances, although the external applications are very different. Courage may be shown in self-defence, or in defending others. He who is fond of approbation, may adorn himself with ear-rings, with girdles, with chains, or embroidery. Religious people, in like manner, may pay divine honors to a bull, to a serpent, to the sun, to saints, or to the God of Christians ;—they may howl to the glory of invisible beings, or worship one Deity, by singing psalms, or by the practice of moral virtue, and all of these acts may flow from the same primitive tendency to veneration.

Finally, propagation is considered as a means of determining whether animals belong to the same or to different species, according as they can or cannot engender together, or as their issue can or cannot procreate. Tried by this test, also, we must conclude that mankind form but one species.

However, it ought to be observed, that natural history can show only the possibility of mankind being derived from one original species, which, by degrees, has undergone various changes; but it cannot prove the reality of this fact, any more than it can ascertain whether the original color of man was white or black, or whether one or two pairs of each species of animals were created at the beginning.

Thus, in the following considerations, I shall take it for granted, that mankind is only one species, comprehending various races, endowed with the same primitive powers of body and mind. Yet, as the sense of smell, attachment, or courage, &c., is stronger in one dog, or in one race of dogs, than in another; so such or such a faculty may be more active in one man, or in one tribe, than in another, though both races are essentially of the same species.

There remains an important introductory point to be considered, viz., whether education, principally instruction, is useful; or, in other words, whether it is better to leave the common people in ignorance, or to instruct all classes of society?

To answer this query in a satisfactory manner, let us remember that the human mind embraces feelings and intellectual faculties; that intellect does not produce feelings, but that the latter are

the main causes of our actions. Hence it is a great mistake to confine education to intellectual instruction. Education, then, if well conducted, embraces both feelings and intellect, and improves both the body and mind. A few observations however, will prove that intellectual education is preferable to ignorance.

There is a great difference in the actions of all nations, through the different states of civilization. The history of each at the beginning is stigmatized with assassination, parricides, incest, and violation of the most sacred oaths. The selfish passions, then, appear to have enjoyed an overwhelming power; and all enjoyments sprung from the gratification of the lower propensities. In periods of ignorance, too, all nations confined moral virtue to themselves, and supposed the rest of nature destined to be their prey. Legislation corresponding with the national character at the beginning, is sanguinary; and capital punishment is common. Nay, it falls not on the criminals alone, but also on their relations, and on whole districts. Their religion is founded on terror, their gods are endowed with all the lower feelings and affections such as selfishness, jealousy, wrath, and fondness for dreadful actions and expiatory sacrifices. If they hope for immortality, the scenes which they expect are conformable to their actual feelings; triumph over enemies, gratification of lower passions, and sensual pleasures. The whole ten-

dency of the mind is atrocity; and their actions might almost be denominated a series of horrid crimes. I doubt whether those who consider the savage state so worthy of commendation, would be disposed to give up the comforts of civilization, and be satisfied with the food, clothing, habitations and accommodations of Barbarians; whether they would prefer roots, acorns, nuts, insects and other animals, at the sight of which we shudder, as their food, to the preparation of a skilful cook; whether they would be better pleased with clothes made of the skins of animals, of leaves or of grass, than with woollen, cotton, linen, or silk habiliments? Whether they would like to exchange our comfortable rooms for a hollow tree, for the cavity of a rock, a den under ground, a hut of reeds, or of turf and branches of trees? Finally, Whether they would seriously think the rough attempts of savages at painting and sculpture, equal to the statues of PHIDIAS, and the paintings of RAPHAEL?

In following the history of mankind, we observe, that, in proportion as nations cultivate their moral and intellectual powers, atrocious actions diminish in number; the manners and pleasures become more refined, the legislation milder, the religion purified from superstition, and the arts address themselves to the finer emotions of the mind.

By observing also the different classes of society, and the inhabitants of different provinces, we

learn, that ignorance is the greatest enemy of morality. Wherever education is neglected, depravity, and every kind of actions which degrade mankind, are the most frequent. Among ignorant persons, *cæteris paribus*, rapacity, cheating, and thieving, drunkenness, and sensual pleasures, are prominent features in the character.

Those then who object to the instruction of the lower orders, can merely act from selfish motives. Being aware of their superiority, they may wish the inferior classes to be obedient to their arbitrary regulations; for unquestionably, it is much easier to lead the ignorant and uncultivated than the instructed and reasoning people. Knowledge too, and the habit of reflection, detect abuses and errors, which selfishness and pride may wish to keep concealed. But whoever thinks it right to cultivate his own mind, cannot with justice desire others to remain in ignorance. He, therefore, who is versed in history, or understands the law of Christian charity, will join those who contend for the benefit of an instruction adapted to every class of society. This then will not be confined to reading and writing, but particularly extended over the moral conduct and all duties and rights in practical life.

The education of the body is called Physical, that of the mind, Moral. It is impossible to decide by observation, whether education modifies the mind itself. We can only show, that we may

exercise an influence on the instruments by which the powers of the mind manifest themselves. Hence, the study of the organization is necessary, even with respect to the moral education of man ; and for that reason, I avoid the common division of education into physical and moral, though I find it proper to divide the following considerations on education into two Sections. In the first, I shall speak of the conditions which contribute to the greater or less activity of the powers of the body and of the mind ; and in the second, of their aim and direction.

SECTION I.

ON THE CONDITIONS OF EXCITEMENT; OR THOSE WHICH CONTRIBUTE TO THE ACTIVITY OF THE INNATE POWERS OF THE BODY AS WELL AS OF THE MIND.

These important inquiries are not sufficiently understood, and are therefore too generally altogether overlooked. They, however, deserve the most serious attention of every natural philosopher. Our reflections on them may be divided into four Chapters, corresponding to the natural divisions of the conditions of excitement themselves. The first condition is founded on the Laws of hereditary descent; the second on those of the Vegetative Functions; the third on Exercise; and the fourth on the Mutual Influence of the Powers.

CHAPTER I.

ON THE LAWS OF HEREDITARY DESCENT.

The developement of the human body is favored, retarded, or disordered, according to the general laws of organization, in the same way as that of other living beings. Consequently children participate in the bodily configuration and constitution of their parents, and also in their tendencies to particular manifestations of the mind, these being dependent on the individual parts of the brain. The elucidation of these subjects is indispensable to a sound system of education. Nay, I am convinced, that this condition exerts a greater and more permanent influence than any other which can be introduced with the view of perfecting mankind. Let us first consider how other organized beings are improved.

Florists, pomologists, and horticulturists, are aware that Nature produces the varieties of plants, and they observe the circumstances which are favourable to the improvement of certain qualities.

They know that the first and most important point is ripe and well-conditioned seed;—the second a fertile and convenient soil. In short, it is a fact, that, in order to improve the vegetable kingdom, propagation is attended to.

In perfecting animals, or in promoting their peculiar qualities, such as the color or figure of horses, the wool of sheep, the smell of dogs, &c. country people have recourse to the laws of propagation. By these means, farmers have succeeded in diminishing or increasing various parts of animals, such as their bones, muscles, &c.

We might naturally suppose, that it would be sufficient to mention the fact, that the organization of man is submitted to the same general laws as that of animals, to induce reasonable beings to take at least the same care of their own offspring as of their sheep, pigs, dogs and horses. But man wishes to make himself an exception from the immutable laws of the Creator, and the result of his ignorance and self-conceit is lamentable. As this subject is of the utmost importance, I shall enter into a few details upon it.

For the sake of bodily health, many natural philosophers, a long time ago, insisted on the necessity of a better regulation of marriage. Their benevolent desire was supported by the constant observation, that health depends on or-

ganization, and that the latter is propagated by birth. "Sir JOHN SEBRIGHT," says Dr. ADAMS, (On the Pretended Hereditary Diseases, p. 33.) "informs us, that if a flock of sheep, in which there is any defect, are permitted to breed in and in, the defect will gradually increase among them; and Colonel HUMPHRIES, by selecting for breeding a marked variety, has succeeded in procuring a flock with deformed bones." Dr. ADAMS adds, that if the same causes operate in man, we may impute to it many endemic peculiarities found in certain districts, which have hitherto been imputed to the water, and other localities.

Those who have more confidence in facts than in speculative reasoning, cannot doubt that the qualities of the body are hereditary. There are family-faces, family-likenesses; and also single parts, such as bones, muscles, hair and skin, which resemble in parents and in children. The disposition to various disorders, as to gout, scrofula, dropsy, hydrocephalus, consumption, deafness, epilepsy, apoplexy, idiotism, insanity, &c. is frequently the inheritance of birth. There are few families where there is not one part of the body weaker than the rest,—the lungs, for instance, the eyes, the stomach, liver, intestines, some other viscus, the brain, &c.

Children born of healthy parents, and belonging to a strong stock, always bring into the world

a system formed by nature to resist the causes of disease; while the children of delicate, sickly parents, are overpowered by the least unfavorable circumstance. Medical men know very well, that in curing diseases, nature is oftentimes more powerful than art, and that the latter is ineffectual, if not assisted by the former. Longevity also depends more on innate constitution than on the skill of physicians. Is it not then astonishing, that this knowledge, as a practical piece of information, is not taught to and disseminated among young people? Indeed, it ought to be familiarly and generally known; not because it is expected that every one would be reasonable enough to regulate his conduct by it, but in order to induce as many as possible to do so. A great number are too selfish to be guided in their own enjoyments by a regard to the condition of their offspring; but many, on the other hand, who reflect on the future, may be induced to avoid, even from a selfish motive, a union with a person who will be likely to embitter their future days. Even the unthinking must perceive, that the enjoyments of life are rendered impossible, when diseases make their ravages in a family; and that love for the most part ceases, when poverty takes up its abode in the house. Others, who wish to live in their posterity, will, when acquainted with the immutable laws of the Creator, submit to them, in order to lay a foundation for the prosperity of their descendants. The physical education, then, of both

sexes deserves the greatest attention and it is impardonable to neglect that of girls.

The laws of hereditary descent should be attended to, not only with respect to organic life, but also to the manifestations of the mind, since these depend on the nervous system. There are many examples on record, of certain feelings, or intellectual powers, being inherent in whole families. Now, if it be ascertained that the hereditary condition of the brain is the cause, there is a great additional motive to be careful in the choice of a partner in marriage. No person of sense can be indifferent about having selfish or benevolent, stupid or intelligent children.

An objection may be made against the doctrine of hereditary effects resulting from the laws of propagation, viz. That men of great talents often have children of little understanding, and that in large families there are individuals of very different capacities.

This observation shows at least that the children are born with different dispositions, and it proves nothing against the laws of propagation. The young ones of animals that propagate indiscriminately, are very different; but when the races are pure, and all conditions attended to, the nature of the young can be determined before-

hand. As long as the races of mankind are mixed, their progeny must vary extremely. But let persons of determinate dispositions breed in and in, and the races will become distinct. Moreover, the condition of the mother is commonly less valued than it ought to be. It is, however, observed, that boys commonly resemble their mother and girls their father, and that men of great talents generally descend from intelligent mothers. But as long as eminent men are married to partners of inferior capacities, the qualities of the offspring must be uncertain. The Arabs seem to understand the great importance of females, since they do not allow to sell a female horse to foreigners and note the nobility of their horses after the females.

The age of propagation too is not indifferent. Animals are not permitted to propagate at all ages, neither too young nor to old, but in the period of their strength. Men of talents and science often marry when their body, particularly the nervous system, is exhausted by protracted studies and debilitating causes. They are seldom rich from birth, and their condition rarely allows them to choose during the period of their greatest energy; yet they might often accomplish more than they do to the benefit of their offspring, were they better acquainted with the laws of the hereditary descent, and the dependence of the mind on the organization of the body, and would they

submit to appreciate such laws more than fashionable manners and customs.

The age of the parents is to be considered both in regard to their own health, and to the constitution of their children. Young trees which bring forth fruit are weak; animals that propagate their species too early in life, generally do not grow strong. Many women who marry when very young, and bear a very numerous family, become early victims to an exhausted constitution.

Farther, the fruit of young plants is imperfect. The eggs of young birds are very small; the progeny of young quadrupeds is feeble and diminutive; and, in like manner, the offspring of living beings, when old, is weak. Such a progeny, therefore, is never destined, by country people, to the preservation of the species. Moses forbade the Jews to bring up the firstling males of animals. (Deut. xv. 19—23.) When both parents marry early in life, and have a numerous family, the eldest children commonly possess less talent than those who are born during the period of vigor of their parents.

The laws of degeneration belong to those of hereditary descent and deserve a peculiar attention. They again are general throughout all nature. Plants cultivated on the same spot degenerate. Wheat must alternate with barley, flax, potatoes,

or other plants. Where firs will no longer grow, beeches will succeed. The seed of plants that degenerate, ought not to be taken for propagation, for they at length perish entirely: nor ought the sickly organization of one tree to be engrafted on another. In this way, we see an explanation why the same sort of fruit-trees dies in whole districts, the external circumstances of which are unfavorable. The sickly condition of the tree is constantly propagated, and it dies at last by the continual and noxious influence from without. All trees, or parts of the same tree, perish a little sooner, or resist a little longer than others, on account of the influence of the branch on which they are engrafted.

The same law of degeneration prevails in animals. Various circumstances weaken their constitution, and, among various conditions, to prevent degeneration, it is necessary to cross the breed, and to renew the blood.

The degeneration of man, too, is certain, in families who intermarry among themselves. Uncles and nieces, or first cousins, or cousins who commit this error for several generations, have no children, or their progeny is commonly feeble. The smaller the number of choice, the quicker the degeneration takes place, and no class of society can be made an exception from this law. Any bodily or mental affliction which may happen to originate

in one individual soon affects such families. This frequently happens among the rich and high ranks; and, as their manner of living is not conducive to bodily strength, it is quite natural that there should be so many living proofs of the truth of this proposition, which invites the friends of humanity to admire the law of compensation.

The great influence of propagation is ascertained also by the fact, that it is infinitely more easy by it to keep up natural changes, and even deformities, than to produce them by art. Deaf people often have children with the same defect; while circumcision among the Jews and Mahomedans has not yet become superfluous. It is more probable that a man born without an arm should have children like himself than that he should do so whose arm has been taken off by the knife of the surgeon.

The laws of hereditary descent are still visible, since the greater number of first-born children are girls; since in one year more girls, in another more boys are born; since, when old and weak men marry young and vigorous females, the greater number of their children are girls, &c. These effects must have adequate causes, and by more patient attention to the phenomena than has hitherto been paid, some valuable conclusions might be arrived at. May not the particular and transient state of the same parents, at different periods,

account, in some degree, for the differences in their children? At all events, the bodily constitution of both parents, in every respect, ought to be attended to. Moses (Leviticus xii. 2d & 5th) ordered a longer period for the purification of a girl than for that of a boy. Is there a natural reason for his having done so? Can any inference be drawn from the observation, that the greatest number of monsters are amongst the female sex?

It is indeed a pity that the laws of hereditary descent are so much neglected, whilst, by attention to them, not only the condition of single families, but of whole nations, might be improved beyond imagination, in figure, stature, complexion, health, talents, and moral feelings. I consider with Aristotle, that the natural and innate differences of man are the basis of all political economy. He who can convince the world of the importance of the laws of hereditary descent, and induce mankind to conduct themselves accordingly, will do more good to them, and contribute more to their improvement, than all institutions, and all systems of education. Yet they embrace more than a choice, according to the beauty of configuration and to the vigor of body and mind. The state of health of both parents, their age, their previous manner of living, contribute to the developement of the embryon; and the state of health of the mother and her vital functions, as digestion, respiration, circulation, &c. during pregnancy as likewise of great weight.

"It is probable," says Dr. RUSH, "that the qualities of body and mind in parents, which produce genius in children, may be fixed and regulated; and it is possible the time may come, when we shall be able to predict with certainty the intellectual character of children, by knowing the specific nature of the different intellectual faculties of their parents. The marriages of Danish men with the East Indian women produced children that had the countenances and vigorous minds of Europeans; but no such results appeared in the children of the East Indian women who intermarried with the males of any other European nation." ("On the Influence of Physical Causes on the Intellectual Faculties," p. 119.)

Three successive generations appear to be necessary to produce an effectual change be it for health or disease. "Si le goître," says Dr. FODERE, "n'est qu' accidental, et qu'il n'y ait qu'un des parens affecté, les enfans ne naissent pas goitreux. Si de pere en fils un goitreux a épousé une goitreuse pendant deux générations, et dans un pays où le goître est endemique, à la troisieme génération l'enfant qui nait, n'est pas seulement goitreux, mais il est encore cretin." ("Traité du Goitre, et du Cretinisme," Paris, 1800, p. 69.) According to the laws of the creation, therefore, it is said, that "the Lord visits those who hate him (in my opinion who do not submit to his laws,) to the third and fourth generation;" viz. by their hereditary dispositions.

Such causes as produce what is called the old age of nations deserve to be remarked. Luxury belongs to them, and its influence, if continued during several generations, weakens body and mind, not only of families, but of whole nations. The degeneration of the organic condition of man, in general, is not sufficiently understood, and is of greater effect than the political economists of modern days are aware of. This neglect is undoubtedly the most influential cause why families and nations disappear.

The Reverend Dr. Smith, who ascribes particularly the variations of man to external circumstances, says, "that Germans, Swedes, and Frenchmen in different parts of the United States, who live chiefly among themselves, and cultivate the habits and ideas of the conntries from which they emigrated, retain, even in our climate, a strong resemblance to their primitive stock. Those, on the contrary, who have not confined themselves to the contracted circle of their countrymen, but have mingled freely with the Anglo-Americans, entered into their manners, and adopted their ideas, have assumed such a likeness to them, that it is not easy now to distinguish, from one another, people who have sprung from such different origins.

On a closer examination, it will be found, that one stock may adopt the manners of another, a

Saxon, for instance, the fashions of the French, but that the original features of the tribes will be preserved, as long as they do not intermarry. The genuine races of Highlanders and Lowlanders of Scotland will not lose their originality by exchanging their countries, but by intermarrying with each other.

The Jews are a striking example, that climate and external influences are less powerful in changing man than propagation. They are dispersed in every country of the globe, and though, owing to the climate they have inhabited, their complexion may have changed, yet, being prohibited by sacred institutions from intermarrying with other nations, they are still distinguishable from other people.

The ancient legislators were very attentive to the laws of propagation. Moses complains (Gen. vi.) that the sons of God saw the daughters of men, that they were fair, that they took them wives of all which they chose: he divided his people into tribes, but prohibited, on pain of death, the intermarriage of the near relations. (Levit. xviii.)

The Greeks, as appears from their customs, philosophy and legislation, had particularly in view the beauty and vigor of the human constitution. "As we," says Plutarch, ("De Nobili-

tate,") "are anxious to have dogs and horses from a good breed, why should we marry the daughters of bad parents?" PLATO spoke against marriages betwixt relations. He, as well as SOLON and ARISTOTLE, considered also the age at which it was best to marry. The ancient philosophers commonly fixed it between eighteen and twenty-four for a woman, and between thirty and thirty-six for a man.

It may be replied, that these considerations can never become practical rules of conduct for society at large. In the actual situation of things I will not maintain the contrary. But we must also admit, that the laws of the Creator will not change to gratify our fancy. If we will not submit to his dictates, we have no right to complain of being punished by unavoidable though disagreeable results. Christian principles are not sufficiently exercised in society, yet it is not, on this account, considered superfluous to teach them; and he who loves mankind will wish for their promulgation. Now, the laws of hereditary descent are in the same situation. Nay, if observed, they would even tend to prepare mankind to receive and keep the precepts of Christianity, which, in the actual and common way of Providence, seems impossible.

I find it also necessary to obviate another objection which may be made by religious per-

sons, who are not aware that the letter kills, while the spirit vivifies. Some, who are entirely unacquainted with natural causes, and who expect all from supernatural influence, may be offended by so much being ascribed to the laws of organization. (If they reflect, and will be consistent with themselves, they cannot reject any thing that is in nature, and the work of the Creator.) The organization is constituted by the same Almighty Being whom they implore to be propitious. (If they will submit to Him, they must acknowledge every law of creation.) The primary arrangements of Nature as certainly proceed from Him, as any subsequent revelation. Shall we, then, have no recourse to natural means to cure diseases, because St. James has admonished us, if any one is sick, to call for the elders of the church, to let them pray over him, anointing him with oil? We read in the Old Testament, that Elias prayed that it might not rain, and it rained not on the earth for the space of three years and six months; and he prayed again, and the heavens gave rain, and the earth brought forth her fruit. Shall we therefore not study the laws of vegetation, and cultivate the vegetable kingdom? Shall we neglect to sow, and expect that by means of prayers we shall be permitted to rear? (In the same way, if, while we say prayers, we do not at the same time submit to the laws of hereditary descent and of organization, supernatural influence alone will not give talents nor bodily health.) The

laws of the Creator have been the first dictated, and must be the first obeyed. A parent who perceives that his child is affected with disease and a weak constitution, and who, while he prays to God for restoration of his health, leaves him in confined air, and under the charge of careless or ignorant servants, has no right to expect that supernatural influence will be exerted in his favor, while he continues to neglect his own duty in contemning the first laws of creation. The Supreme Being gave us understanding that we might perceive these laws; and having perceived them, it is our first duty to obey them as His dictates; and having done so, we may then, but not till then, expect His blessing to attend us. The special obedience to the natural laws of hereditary descent is an indispensable condition to the improvement of mankind; and nothing but ignorance, superstition and prejudice can oppose it.

The influence of these laws may be shown to young persons, first in plants, then in animals, and at the end in mankind. Many parents are cautious and fearful of speaking of such notions to their children, and do not think of the anxiety with which children look for information of that kind, and of the benefit they may derive from it. Such information, when given by the parents, will be received with confidence and respect. Some young persons will possess reflection enough to attend to their bodily health, from the consideration

that their constitution will be communicated to their offspring. I know positively, that such a proceeding has been more effectual and beneficial than endeavoring to prevent children from acquiring any knowledge of that kind, or to conceal the effects of the disorderly satisfaction of physical love. This propensity deserves the same attention which we pay to hunger and thirst. Both are active without our will; and their activity must be directed. Why should we not have recourse to the understanding as far as possible, to regulate the actions, and employ natural means of correction against natural faults? How can we expect that children should suppress a strong internal feeling, without being acquainted with the bad consequences of its abuses, and with its destination? It seems therefore advisable to show the dreadful effects of Onanism to those who are inclined to this aberration; at first with respect to their own health, and afterwards in relation to their offspring.

It has been my object in this Chapter to bring under consideration a most important point, which must precede, and which will influence whatever remains to be done in education. Yet I do not deny the efficacy of various other conditions which I shall examine in the following pages.

CHAPTER II.

ON THE LAWS OF THE VEGETATIVE FUNCTIONS.

It is reasonable, when we desire the improvement of any living being, to employ all the means which may contribute towards its perfection. We have seen in the preceding Chapter, that man is born sickly or healthy, deformed or well shaped, an idiot or a genius,—in short, that the human being enters life with the greatest modifications of bodily and mental endowments. The innate constitution, then, which depends on both parents, and the state of the mother during pregnancy, is the basis of all future developement.

Being placed in the world, man is subjected in every respect to the laws of organization. Organization is influenced by light, air, climate, nourishment, bodily exercise, rest, sleep, cleanliness, and excretions. The body of man, like other organized beings, undergoes various changes: it begins, increases, arrives at its full growth, decreases, and dies. There is a certain regularity in the succession of these natural changes; and accordingly, the duration of life is divided into different periods, commonly called ages.

These changes cannot be entirely prevented, but they may be accelerated or retarded by external influences. The regulation of all the conditions which contribute to the developement of the body and of its parts, and to the duration of life, constitutes what is termed Physical Education.

I shall not endeavor to explain Life. I am satisfied to say, that it embraces all the vital functions from conception to death. It certainly depends on various conditions, several of which are not yet sufficiently understood. The chemical explanation is not more satisfactory than that founded on mere mechanical laws. Life is more than the effect of a machine, more than a crystalization. The life of man is also more than the organization of a plant, and even more than that of an animal. Some fluids belong to its necessary conditions, such as caloric and the electric fluid; but it remains undecided how far some ancient and modern physiologists are right or wrong in speaking of a peculiar Vital Principle, which in ancient times often was called the Soul of the World; and which sometimes has been confounded with the immortal soul of man.

The modern physiologists consider rather the functions of man than the principles of which he is composed. They place together the functions without consciousness, and call them Automatic Life; while the functions with consciousness are known under the name of Animal or Phrenic Life.

It is not yet generally admitted, that the phrenic, like the automatic functions depend on the organization. Physical education, however, evidently rises in importance, if the manifestations of the mind are modified in energy and quality by the influence of the body.

In this respect various opinions have prevailed, and still prevail. There is an ancient belief in oriental countries, that the body prevents the soul from communicating with superior beings, and from exercising freely its powers. (PYTHAGORAS, PLATO, and almost all metaphysicians, fancied, that in this life thoughts might be manifested without the medium of organization.) The body was considered as a prison of the soul. Hence the great tendency to deliver the immortal soul from the mortal body; hence the spontaneous vexations and torments of the body; and hence many nonsensical ideas of castigation.

This opinion, however ancient it may be, is yet erroneous. Experience, which must constantly guide our reasoning, proves the dependence of the mental operations on the body during this life. Phrenology teaches the particulars of this doctrine.

The duration of life is commonly divided into Infancy, Adolescence, Adult and Old Age. With respect to physical education, the time from birth to that of full growth, is the most important. It

is preparatory for the rest of our days, and has also a great influence on our offspring. It may be subdivided into several periods, the first of which is that from birth to two years, or to that of the first dentition,—I call it Infancy : The second from two to seven years, or to the second dentition, viz. Childhood : The third from seven years to puberty, viz. Adolescence : The fourth from puberty to full growth, or to the Period of Marriage. Before I enter into details on these periods, I shall notice some general considerations, and begin with Longevity.

It is not probable that the life of man has diminished with the duration of the world ; it is more reasonable to suppose, that the years mentioned in the Old Testament were shorter than ours. It is a common observation, that the same term has quite different meanings among different nations, and even in the same nation at different periods of its history. The English and Germans, for instance, measure the distances of localities by miles ; but it is known that about six English miles make only one mile in Germany. In the same way, it may be that the expression *year*, did not always denote the same lapse of time. It is also possible that the duration of a family, that is, of all male descendants, was considered as the continuation of the same life, as it is still a common saying, that parents continue to live in their children. Men, like quadrupeds, commonly live in the state of

nature five or six times longer than they grow; and many individuals of the human race arrive still at an age corresponding to these proportions. But there is no reason to suppose that the Jews made an exception from the physical laws in general, whilst on the other hand, it is more probable that life, generally speaking, is shortened by artificial means, rather than by the lapse of time since the creation.

Among the causes which contribute to longevity, the most important is the innate bodily constitution. In this respect, savages have an advantage over civilized nations. The health of the former is more durable, and they do not experience a number of bodily and mental disorders with which the latter are molested.

A moderate temperature is more conducive to old age than great heat. The latter accelerates the natural changes of organized beings, and brings them sooner to death. Pure, dry and cold air, moderate exercise of all the bodily and mental faculties, a good physical education in general, and quietude of the mind, are all very favorable to longevity.

On the contrary, hereditary dispositions to diseases, a weakly constitution, great and sudden changes of temperature, intemperance, want of bodily exercise, noxious occupations, too great applica-

tion of the mental powers, misery, unwholesome food, a want of sufficient rest, every kind of debilitating influences, disagreeable affections of the mind, such as jealousy, envy, fear, grief, &c., are hurtful to health.

The influence of nature in preserving the species, and also the individuals, is great, and has been spoken of at all times, under the name of *vis plastica* or *vis medicatrix naturæ*. It is visible in the healthy and diseased state. Yet, however effectual nature, and however favorable all circumstances may be, the succession of the different ages cannot be prevented, and death is at last unavoidable. Physical education can produce only modifications, but can never annihilate the immutable laws of the Creator.

The modifications produced in the body by external circumstances, deserve a special attention. Plants and animals which can live in various climates, are extremely modified by the influence of outward conditions. Fruit-trees which have been transplanted from the south to the north, bring forth the same kind of fruit, but of modified qualities. The grapes of France excel those of England.

Leibnitz has already remarked, that plants and animals show the same type of configuration, are long and slender, or short and stout, in different

countries. We may add, that it is the same with man. In Angora, the beard of the men is modified like the hair of animals. In countries where the grass of the meadows is long, the cattle are tall, and animals in general have long extremities. Mankind shows a similar make.

The influence of physical education may be examined with respect to the body as a whole, or to the individual systems, such as the muscles, blood-vessels, bones, nerves, digestive organs, &c. It is certain and generally known, that climate and the manner of living modify the whole organization of man. Climate, in its general acceptation, designates not only temperature, but all external influences, particularly air, light, dryness and moisture, and food. A particular effect produced by a high temperature on living beings is, that they undergo their natural changes with greater celerity than in colder regions. Annual plants of the south, the aloes, for instance, when carried into northern countries, last many years.

It is quite superfluous to insist on the modifications produced in organized beings, by food, and other external circumstances. Who does not know that the constituent parts of milk, such as butter, cheese, and whey, of the same cow, vary according to the food with which she is nourished; that the flesh of roes, hares, rabbits, fowls, &c., though each sort preserves its specific taste, is

greatly modified by the food on which the animal lives?

This principle, however, is not sufficiently attended to in the physical education of children; they are commonly treated according to a general plan, while external circumstances ought to be regulated according to the individual temperament.

In this respect, a very important question may be examined, viz. How far may external circumstances contribute to the developement of individual parts of the body? It is known that different systems of the body, such as the muscles, the nerves, the digestive organs, &c. do not possess precisely equal activity in the same individual. It would be extremely interesting to ascertain, that such or such a climate, such or such food, &c. is more or less favorable to the improvement of particular systems of the body.

The same degree of excitement, whether of temperature or of food, may stimulate one system, and weaken another. Great heat accelerates the circulation of the blood, and debilitates the digestive organs. As the manifestations of the mind depend on organization, it is conceivable why even talents and moral feelings depend on the influence of climate and nourishment. All observations of this kind have been made merely with

respect to health and the intellect in general. But as medical men admit that some drugs act more on the nerves, others on the blood-vessels, others on the skin, others on the abdominal or urinary secretions, why should aliments, and other external influences, not be more or less favorable to individual parts of the body? In this way, nutrition, and the regulation of external circumstances, will increase in importance as they are discovered to contribute, not only to the developement and organic constitution of the body in general, but also to the improvement of single parts.

In this respect, our knowledge is by no means satisfactory; yet every one will feel the importance of these considerations, and wish for possitive observations. This interesting subject, indeed, deserves the attention, not only of medical men, but of all those who have the charge of education.

I shall now add some ideas concerning the regulation of the vegetative functions, during the different periods from birth to the full growth, or to the time of marriage.

PERIOD I.

FROM BIRTH TO THE AGE OF TWO YEARS, OR INFANCY.

In this age, the mortality of children is the greatest; and hence the care bestowed on their treatment must be proportionate to the dangers to which they are exposed. Let us then see what is to be done, with a view to regulating external influences upon them; admitting however as I have already stated, that the most important requisite to health and prosperity is a good innate constitution. Among the external circumstances after birth, the most essential are Temperature and Food; then follow air, light, cleanliness, sleep, rest and bodily exercise.

Temperature.

It is known that without a sufficient degree of caloric, no act of vegetation or animalization can take place; and that before birth, the child is constantly exposed to the temperature of a lukewarm bath; was it then reasonable to think, that immediately after birth a low temperature should be most suited to its health? In new-born chil-

dren it frequently happens, that circulation in the external vessels of the skin is impeded by the influence of cold air, and that from this circumstance a kind of jaundice arises. In more advanced years, great changes of temperature are hurtful to health. In hot climates, tetanus is often the result of sudden refrigeration. We also see the natural instinct of birds leads them to cover their young with their wings. How, then, was it possible to fancy with J. J. Rousseau, that new-born babes may receive benefit when exposed to cold, or when bathed in ice-cold water, or in snow? Such a treatment, it is true, has been defended by an appeal to the example of northern nations. But it has been overlooked, that in those cold countries the whole animal economy of the parents is different, and that the children participate in their bodily constitutions. The mothers in northern regions digest things which the delicate women of the south could not take without injury. It would, however, be as reasonable to feed a southern mother on fish-oil, as to bathe her tender offspring in ice-cold water. The bad effect of cold-bathing upon new-born children is now ascertained, and this nonsense has been given up. It is not, however, my opinion that young children ought to be brought up as in a hot-house. I grant that they are often kept too warm and too much wrapped up. Man being obliged to bear various temperatures, children should be accustomed to them by degrees. But the weaker and

the more delicate children are, the more care is requisite. In general, however, cold is better borne by young than by adult persons.

Food.

It is scarcely imaginable how the simple proceedings of Nature should be neglected, and fantastical dreams substituted in their place; how any one, for instance, could doubt, whether, during the first days, the milk of the mother were wholesome to the suckling, whilst calves, puppies, and the young of all quadrupeds, suck immediately after birth. Why will man alone disdain the laws of Nature, who takes so much care for the preservation of the species? How was it possible to think, that honey, syrup of rhubarb, or even wine, was more wholesome to young babes than their mother's milk, which at the beginning is thin, watery, and fit to evacuate the meconium collected in the child's intestines, and which, after a few days, becomes thicker and more nutritious? Nothing but ignorance would endeavor to govern Nature. Thus, the mother, after having taken rest from her labors, and some restoring nourishment, should, as soon as she has got milk, give suck to her child. In cases only where she has got no milk, light artificial nourishment ought to be given, till Nature supplies a better food.

Much has been said upon the question, whether the child is better nourished by its mother's milk or by that of another nurse, or by heterogeneous substances. I think nature must decide. Experience shows, that, *cœteris paribus*, a plant succeeds better if it be not transplanted from one spot to another; and, that young trees transplanted from a fertile soil into a barren one, languish or perish; while, on the other hand, if left as they were, they grow luxuriantly. Young birds may be nourished with eggs, viz. with substances on which they lived in the embryo state. Young mammalia also may be well fed upon milk and eggs; and why should it not be the same with young children?

If the mother be healthy, and her milk nourishing, it will agree the best with the digestive powers of the child; and by giving suck, the mother will be freed from various complaints, noticed by many medical writers as the result of neglecting the first duty of a mother. In many cases, however, it will be better for the mother, for the child, or for both, to feed the child on the milk of a nurse; or, if this be impossible, by other alimentary substances. Many mothers of a delicate constitution are weakened and fall into consumption in consequence of giving suck. Many children also perish in such cases from want of sufficient nourishment. A mother is certainly blameable, if, from a love of dissipation and perpetual amusement, she persuades herself that she is sent

into the world merely to pass through it in the most easy manner. But in the above-mentioned examples, it is most advisable to have recourse to the milk of a healthy nurse, who, as far as possible, should resemble the mother in age, temperament, and in the period of her delivery. If new-born children are given to nurses who have been delivered some time before, artificial means, such as syrup of rhubarb, or chiccory, generally become necessary, to evacuate the meconium; or we may act on the babe by the medium of the nurse, in giving her alimentary substances that make her milk thin and clear, or even that are slightly purgative.

The milk of a wet-nurse varies according to her age, her bodily constitution, to the food she takes, and according to her manner of living in general. She must avoid every thing which disturbs digestion, particularly strong spices, spirituous liquors, and disagreeable affections of the mind. The suckling participates in her bodily disorders. It is liable through her to vomiting, to hiccough, to pain of the belly, diarrhœa, uneasiness, to convulsive motions, and various other complaints.

Bad digestion, and all symptoms which result from it, are frequently caused by feeding the infant immediately after birth with artificial aliments, such as panada, pap, &c. It will be found that new-born children succeed best, if they live

for the first three months only on the milk of the mother, or of a sound nurse. By degrees, they may be accustomed to some other food, according to their temperament and digestive powers, beginning with liquids, such as milk and sugar, broth, boiled biscuit, rice-cream, &c. and so go on to solids. The younger the child is, the less nourishment should be given at once, and the oftener repeated: older children may take more food, and at greater intervals.

The nurse's milk certainly has great influence on the developement of the suckling. Those, however, who think that it imbibes the moral character of its nurse with her milk, are mistaken. If it were true, that a child brought up upon goat's milk was fond of jumping, that another fed with swine's milk was dirty, it would follow that adult people ought also to adopt the character of the animals on whose flesh they live. Men and women who live in the same manner, would be endowed with the same affective and intellectual faculties. Nor could it happen, that different children, nourished by the same mother, should show quite different characters, even before they had taken any heterogeneous food. Thus, the nurse's milk will contribute to the nourishment and developement of the instruments of the mind; but it will not give rise to determinate qualities. Her moral character may change her milk with respect to its healthy condition, but it cannot

produce talents or feelings. Finally, the mental powers of children though innate are more or less exercised and directed by the nurse's temper and mental capacity, and the nurse is the first moral and intellectual instructor.

Air.

Atmospheric air is another indispensable condition of human life, and its physical properties and constituent parts, have an influence on all the vital functions. Its transparency is necessary to vision, or to the passage of light: its fluidity permits the free motion of the body in it. In virtue of this quality it admits also of being changed or renewed. Its elasticity in propagating its vibrations assists the sense of hearing. Its weight compresses the fluid and solid parts of our organization. Moreover, as the temperature of the atmosphere is commonly below that of our body, the air receives the superfluity of caloric. Generally, however, we are obliged to guard against the disagreeable sensations of cold caused by the too great privation of caloric.

The constituent parts of the atmosphere are extremely important to the body. Its oxygen and caloric are essential to the sustenance of life. Its azote, hydrogen, carbonic acid gas, water, electric fluid, and the various exhalations of plants

and animals, have a great influence on the functions of organized bodies. Certain conditions of the atmosphere cause plants of different kinds to perish. Some winds and conditions of weather produce epidemic diseases among animals and mankind. In some persons, the digestive powers are disturbed at the approach of a storm. Persons whose limbs have been injured by wounds, can foretell the changes of the weather by the pains they feel. Nervous and delicate constitutions perceive the slightest difference in the state of the atmosphere. Many of them know by their bodily sensations whether the wind blows from the north, east, or west.

New-born children, according to their innate temperaments, are more or less benefited or disturbed by the condition of the atmosphere. Some constitutions require a dry and others a moist air. It is, however, a general rule, that it should be pure, and not impregnated with noxious exhalations.

Light.

The influence of light is also necessary to the developement and health of organized bodies in general. It changes the color of plants and animals, and the complexion of man. Plants kept in darkness grow pale and yellow. Worms and

insects confined to dark places remain white. Those who spend their lives in their closets, have a pale and yellowish complexion. The whole organization, being deprived of light, grows weak and fat. It is affected with scurvy or putrid complaints, and the liver enlarges. Hence dark habitations, narrow streets, high houses, little windows, and whatever shuts out light from dwelling-places, is unwholesome.

Light awakes us from sleep; it excites all functions of the body, particularly those of the skin. Its sudden impression excites sternutation. Too much light produces headach, inflammation of the eyes, of the skin, of the throat, and of the brain; hence, its regulation is of great importance.

The eyes of new-born children should not be exposed to a strong light at once, and when they begin to see, they ought to be placed so that the light is before them, since they always direct their eyes towards it, and may acquire an irregular look, the eyeballs being turned too much upwards or sidewards.

Cleanliness.

The skin having a great influence on the preservation of health, by its absorption and excre-

tion, its pores must be kept open by washing the body, and by changing the swaddling-clothes and linen whenever they are unclean. According to the condition of the skin, it may be washed with lukewarm water only, or with water and wine, to strengthen it, or rubbed over with some oily substance if it be dry and rough.

Some parts, such as the folds of the neck, behind the ears, the interior of the legs, &c. which are liable to be inflamed, deserve particular attention. They may be washed with a solution of alum, or powdered with *pulvis lycopodii*, or besmeared with cacao-butter, oil, or any other pure greasy substance. I have already mentioned, that children should be accustomed by degrees to a lower temperature: hence the water or the bath employed as the means of cleanliness, must gradually be used colder and colder. The body, like the face, might be exposed by degrees to the atmosphere.

Sleep, Watching, Rest, and Bodily Exercise.

Before birth, children seem to sleep almost continually. After birth, the younger the infant, the more sleep it requires. Young children then should never be awakened, and be allowed to sleep as long as they please. It is, however, wrong to employ soporiferous means to produce

sleep. On the other hand, they may be soon accustomed to awake and to fall asleep at a certain hour, and this habit is useful in various respects.

The free exercise of their limbs is very advantageous to them. No part of the body ought to be pressed. It was an absurd custom to tie the tender creatures, and to impede all their motions. It is particularly necessary to attend to the head, and not to let it fall backward, since the nerves of the spinal cord may suffer from pressure, on account of the cartilaginous state of the vertebral processes.

We ought not to be uneasy when children cry a little. By crying, the lungs are distended and strengthened, the eyes and nostrils are cleaned, and the circulation of the blood is promoted. It is imprudent to lift up children by one part only, such as by one hand or one arm, luxations being easily the result of this practice. It is also wrong to place delicate and fat children too early on their legs, since curvations of the spine and hip bones may be thereby produced. Moreover, the thorax and shoulders are often injured by leading-strings, which, in consequence, ought to be abolished. It is true, that many children are strong enough to resist, but delicate ones must frequently suffer by them. Too violent shaking may injure the stomach and brain, and produce vomiting,

principally at the moment when the stomach is full. Bodily exercise is of great influence, but it is to be directed with caution.

PERIOD II.

FROM THE AGE OF TWO YEARS TO THAT OF SEVEN, OR CHILDHOOD.

Before I consider the particularities of this period, it will be interesting to advert to a few circumstances with respect to dentition. At first, the natural food of children is liquid; but about the seventh month, instruments which are fit to assist the digestion of solid aliments, viz. the teeth, appear. The developement of these organs is often the cause of various complaints. The saliva is generally secreted copiously, frequent sneezing occurs, the gums grow red and hot, sometimes they are swollen, one or both cheeks are red; the child carries his hands, and every thing he holds, into his mouth, and presses the gums against it. At the end, white spots are seen where the teeth appear. Commonly the two middle incisors of the lower jaw first cut through the substance of the gums. A little while after, the corresponding incisory teeth of the upper jaw show themselves, then the lateral incisors, the eye-teeth, and the

lateral grinders. When the small molar teeth have come through at the age of about two years, the first dentition is complete, and the life of the child, which before was precarious, is then more secure; for it is ascertained that a third part of children dies before the age of twenty-four months.

The growth of teeth, though a natural operation, causes various disorders in the vital functions of children. Diarrhœas and convulsions are the most fatal accidents attending difficult dentition. The state of the jaws alone, or, by sympathy of several other parts, sometimes of the whole body, is inflammatory. Hence the treatment of such children must be conformable. As their constitutions, however, are extremely modified, a physician ought to be intrusted with the particular care of them. The general rule is, that every kind of stimulus ought to be avoided. Tepid bathing is an excellent antiphlogistic.

It may be observed in general, that in infancy the vital motions tend particularly toward the head, and that, therefore, this part is the principal seat of the afflictions peculiar to this age.

In order to favor the cutting through of the teeth, the gums may be rubbed with sugar or bits of althea-root, moistened with honey or syrup, and kept between the jaws. The nurse may also introduce her little finger, moistened with honey,

between the gums of the child, to soften them, and to relieve the pains of the young creature. Sometimes little incisions are made into the gums with evident advantage. The excretions of the skin and bowels must be kept free.

To the twenty teeth of the first dentition two new grinders in each jaw are added at about the end of the fourth year. They differ from those that preceded them in this, that they are destined to remain throughout life, whilst the primitive or milk-teeth are lost at seven years of age, in the same order in which they appeared, and are replaced by new teeth, better formed, and provided with longer and more perfect roots. Towards the ninth year two new large grinders come forth beyond the others. There are then twenty-eight teeth. Between eighteen and thirty, or sometimes still later, the *dentes sapientiæ*, two in each jaw, complete the second dentition.

Dentition, like all other acts of the living economy, is subject to endless variations. There are instances of children that have come into the world with one or two incisors, and there are often supernumerary teeth. It is difficult to say why the primitive teeth are detached and replaced by others, which have remained so long buried within the alveolar processes. Teeth of a third set have been known to be cut in very old people.

Generally speaking, teeth are not taken all the care of which their importance demands. They ought at least to be kept clean. Those who neglect this duty, offend against the first requisition of nature ; and if they are punished by tooth-ache, they receive only their desert. The condition of the teeth certainly depends on the whole constitution of the body ; and in many cases, the advice of a good dentist, who understands not only the operative part of his art, but also the animal economy, is to be recommended.

The teeth are in close relation with nourishment, and this deserves particular attention. The necessity of taking nutritive substances is generally known and indicated by hunger and thirst. The nourishment must be modified in quantity and quality according to age, to the bodily constitution, to climate, to season, and to the manner of living. The influence of different kinds of food on the whole constitution is evident, from the modified flesh of animals of the same species, fed on various aliments. It is useful to vary the food, and nature who has assigned to different animals their different aliments, has in this respect allowed to man the greatest variety. He is almost omnivorous, and he alone understands the art of cookery, by which he facilitates digestion.

In children, the functions of nutrition are quicker ; they die sooner of inanition than adult per-

sons; they require more frequent feeding, and a larger quantity of food, as they not only change the matter of their body, but increase also.

As children grow stronger, they will digest substances of a heterogeneous and more solid nature. In general, the more simple and plain, the better are the aliments; and every food which digests is wholesome. It is, however, known, that lymphatic constitutions require nutritive and invigorating substances; that nervous temperaments suffer from stimuli, and stand in need of light and simple aliments; and that weak bowels do not bear vegetables, fruit, and paste, these aliments giving rise to worms and scrofulous diseases. Such intestines then must be strengthened by animal food, steel-water, some wine and bitters.

In cold climates animal food is necessary to man; he grows pale and languishing on vegetables. In hot countries, on the contrary, fruit and vegetables nourish sufficiently, their nature being quite different from that of plants in northern regions. This is evident, since the spices we take to assist digestion, belong to the vegetables which grow in southern climates. A cold dry air excites the appetite, while a hot and moist atmosphere weakens the digestive organs.

The alvine and cutaneous excretions are in intimate connection with nutrition. Noxious par-

ticles, when they remain in the intestines, are absorbed and brought into the circulation. The abdomen being constipated, the bloodvessels are compressed, the circulation is impeded, and piles are produced. The blood is carried to the brain, and causes head-ache. Thus, the excretions must be taken into consideration and regulated. They vary in quantity and quality according to age, temperament, nutrition, weather and season. Perspiration is more considerable in youth than in old age, more in hot than in cold weather, more in irritable than in inert temperaments. Children suffer from being kept too warm. Yet too sudden and too great changes of temperature produce in them, as well as in adult persons, catarrhal affections, coughing, inflammation, diarrhœas, &c.

The skin ought to be kept clean, exposed to light and the air, and thus rendered less sensible to external impressions. Health is preferable to a pale white skin and a sickly constitution. With respect to clothing, the general rule is, that no part of the body ought to be pressed. Weak organs may be supported, and the whole body defended against cold, but all the movements of the body ought to be free and easy. It is a false taste to hurt the health, or to injure the vital functions of females with a view to increase their beauty. A sedentary life is adverse to health in general, particularly to that of children. It is the cause of incalculable mischief. Children require more bodily exercise, and more sleep than adults.

During childhood, as well as in infancy, the regulation of the vegetative functions ought to be the most important point of education. A good and healthy organization is the basis of all employment and of all enjoyment. Many parents, however, are anxious to cultivate the mind at the expense of the body. They think they cannot instruct their offspring early enough to read and to write, whilst their bodily constitution and health are overlooked. Children are shut up, forced to sit quiet, and to breathe a confined air. This error is the greater, the more delicate the children, and the more premature their mental powers are. The bodily powers of such children are sooner exhausted, they suffer from dispepsia, headache, and a host of nervous complaints; their brain is liable to inflammation and serious effusion; and a premature death is frequently the consequence of such a violation of nature. It is indeed to be lamented, that the influence of the physical on the moral part of man is not sufficiently understood. There are parents who will pay masters very dearly, in hope of giving excellency to their children, but who will hesitate to spend the tenth part to procure them bodily health. Some by an absurd infatuation, take their own constitutions as a measure of those of their children, and because they themselves in advanced life can support confinement and intense application with little injury to health, they conclude that their young and delicate children can do the same. Such notions are

altogether erroneous,—bodily deformities, curved spines and unfitness for various occupations, and the fulfilment of future duties, frequently result from such misunderstood management of children. The advantages of a sound body are incalculable for the individuals themselves, their friends, and their posterity. Body and mind ought to be cultivated in harmony, and neither of them at the expense of the other. Health should be the basis, and instruction the ornament of early education. The developement of the body will assist the manifestations of the mind, and a good mental education will contribute to bodily health. The organs of the mental operations, when they are too soon and too much exercised, suffer and become unfit for their functions. This explains the reason why young geniuses often descend at a later age into the class of common men. Indeed, experience shows, that among children of almost equal dispositions, those who are brought up without particular care, and begin to read and to write, when their bodily constitution has acquired some solidity, soon overtake those who are dragged early to their spelling-books at the detriment of their bodily frame. No school education, strictly speaking, ought to begin before seven years of age. We shall, however, see in the following chapter, on the laws of exercise, that many ideas and notions may be communicated to children by other means than books, or by keeping them quiet on benches. When education shall become practical and applicable to

the future destination of individuals, children will be less plagued with nothings, but they will be made answerable not only for their natural gifts of intellect, but also for the just employment of their moral powers and the preservation and cultivation of their bodily constitution, since vigor in it is indispensable to enjoyment and usefulness. They will be made acquainted with the natural laws of nutrition and all vital functions, and with their influence on health.

The import of the laws of the vegetative functions is so great, that those who direct mankind, ought to be permitted to regulate them in many respects. The Mosaic law may serve as a fine specimen. All ancient legislators paid great attention to these laws, as well as to those of hereditary descent. This knowledge will be of greater use than to forbid eating meat on certain days. Teachers ought to know, that nothing is unclean or an abomination in itself, but becomes so by being ill used. Man must eat and drink to live, but he ought to avoid all unwholesome food, and whatever disturbs his health.

The submission of man to the laws of the vegetative functions is necessary during his whole life, but particularly from birth to the age of complete developement, since the time of growth is preparatory for the rest of life.

An additional observation concerning the vegetative functions is, that they, like all others, admit of great modifications, nay, even of idiosyncrasies. Some persons on account of their innate vigor and strong constitution succeed under all circumstances: they resist all noxious influences they digest whatever they eat, whilst others suffer from particular aliments, such as mutton, pigeon, veal, cauliflower, &c. These latter and all other particularities can only be observed, but can never be explained. In regard to them, every one must be his own physician. Demosthenes and Haller were kept in a state of regular excitement by drinking nothing but water. Coffee was the favorite stimulus of Voltaire, and tea that of Dr. Johnson. Sir Isaac Newton lived upon vegetables when he was employed in composing his famos treatise on Optics. Hobbes sat in his study, enveloped in the smoke of tobacco, &c. In general, however, a strict attention to physical education cannot be insisted upon too much among civilized nations. During the periods of life, from birth to the state of full growth, a third kind of laws is to be kept in view, and these shall be considered in the following pages.

CHAPTER III.

ON THE LAWS OF EXERCISE.

THESE laws embrace what is called Education in a more limited sense, but in this respect many errors are caused by the true meaning of the word *Exercise* not being sufficiently understood. I employ this expression as synonymous with putting into action, and distinguish Exercise from Habit; the latter being the result of the former.

Habit.

Habit has two significations: it sometimes indicates the result of diminished activity, and at other times a greater facility of acting. A power being too active, becomes fatigued, diminishes, and is finally exhausted. Moreover, all natural powers become accustomed to external impressions, and the former become the less affected the longer the latter are applied. The mimosa sensitiva, when shaken for a certain time, ceases to fold its leaves. In the same way, each sort of impression on the organization loses its effect by frequent

repetition. Even noxious impressions, when repeated, are less felt than they were at first. In this sense MITHRIDATES accustomed his stomach and bowels to poisonous substances. The attendants and nurses of patients become in a certain degree insensible to contagious diseases in hospitals. The mind itself shows less energy at each repetition of the same functions. It becomes accustomed even to misfortune and painful situations. Time is a great remedy of many evils.

Organized beings adapt themselves in a surprising degree to external impressions, and a change of place and various circumstances is frequently less advantageous than might have been expected. Prisoners, who have been confined for many years to dungeons, or unwholesome habitations, fall sick when they obtain their liberty. Many morbid, but accumstomed affections, such as old sores and exudations, &c. are to be removed with the greatest precaution, and sometimes to be left untouched. Body and mind successively take a turn which can be changed solely by degrees.

All changes which nature produces are successive, and art ought to imitate her proceedings. It is the same in dietetic rules, and in every manner of feeling and thinking. Drunkards cannot leave off their bad habits suddenly without injuring their health. Those who are near starving from inanition, will perish if too much nourishment be

given ; and too much light dazzles those who have lived long in darkness. The bad effects of great and sudden changes of temperature on inanimate bodies, such as glass, or on plants, animals, and man, are generally known. Those who are accustomed to certain mental occupations, feel great reluctance to give them up. In the same way, great and sudden changes of political, moral, and religious opinions, are not borne with indifference. Habit is a second nature, physically and morally speaking.

The living generation, if not prepared for it, generally rejects every reform. It is only in process of time that the adherents to any new doctrine become numerous ; and any doctrine, though false, when once admitted, will be replaced by another and a better only by degrees. Yet it is natural that the more agreeable a doctrine is, the sooner it will gain ground, and that a precept which commands resignation will be submitted to, in proportion to the reward it promises. Christianity assigns eternal happiness as the reward for temporal conflicts ; and it was adopted by fishermen and the poor sooner than by the rich.

The law of modifying mankind, or of producing changes is seldom understood by reformers. They are commonly too hasty ; though, at all times, experience has shown the danger and harm of such a proceeding. When changes are to be

made, let them be gradual ; the greater the alterations you wish for are, the slower must be your method of proceeding ; keeping, however, constantly the aim in view. The precipitancy of common reformers can be excused only by their ignorance of human nature, and by their erroneous opinion, that it is sufficient to point out errors, and to propose principles, in order to perfect man without considering that he must by degrees be prepared for, and accustomed to them.

The facility of accommodating man to new impressions greatly depends on age ; it succeeds best during the period of growth, whilst in latter years we are less susceptible of changes. It is therefore not astonishing, that all new doctrines have been received and propagated by youth and new generations.

The law of accommodation, however great, never annihilates the general laws of life. It is even subordinate to them, and cannot prevent the successive changes of age. Again, every individual being born with a different constitution, and with different dispositions, is not equally capable of accommodating himself to circumstances, and hence each will present some modification, though the external influences are the same. This is the case in the automatic and animal functions. Notwithstanding these restrictions, the law of accommodation is incalculably great in the education both of individuals and of nations.

The second meaning of Habit is an increased facility of acting in a certain manner. In this acceptation of the word, it is still more interesting to education than in the former, and deserves a detailed elucidation.

Exercise.

I have already mentioned that I employ the word exercise as synonymous with putting into action. Now the first law of this kind is, that exercise strengthens powers. This principle is quite general throughout nature, and extends even to inanimate bodies. Musical instruments being played on by masters in the art, improve. The power of a magnet to support weight may be increased, by gradually appending to it more. Every power, both in automatic and animal life, may be exercised, and thereby gains in activity. There is something analogous even in the diseased state. Each organic part, having once been affected by any disorder, is liable to relapses ; in the same way as, according to the first meaning of habit, by repetition and continuation many diseases are exhausted.

The digestive organs may not only be accustomed to various aliments, but they become also more active by being satisfied. In persons who spit out the saliva, the glands secrete more abundantly. All muscles which are exercised increase

in strength. Smiths, and those who use their arms, acquire more power than those who seldom employ them. Bodily exercise in general strengthens ; and a sedentary life weakens the constitution.

The influence of exercise on the functions of the five senses, is generally known and admitted. The sense of feeling often acquires a very high degree of perfection in persons who are blind. In the first vol. of Phrenology, speaking of the Generalities of the external senses, I have quoted many examples which prove, that they become more active by practice.

It is the same with the internal faculties manifested by means of the different parts of the brain. Each mental power, if it be sufficiently cultivated, grows more energetic, whilst, if neglected, it shows less activity.

In this chapter on the Laws of Exercise, I take for granted, that all dispositions are innate and discovered. I refer for the details of this important proposition to the first vol. of Phrenology. Hitherto philosophers have admitted a few general powers, and have derived from them all particular manifestations. The greater number of them consider the intellect as the cause of the feelings. Accordingly, they confine education to the Understanding, and do not think of cultivating the

Feelings themselves. This, however, is a great error, and the first thing to be done is to specify the primitive powers of the Mind; and then, as they exist independently of each other, every one must be exercised for itself. The legs or arms will not be strengthened by reading treatises on muscular motion. The digestive organs will not act with more energy in those who know all the theories which have prevailed on digestion, and who are even able to explain the causes of hunger and thirst. Let such persons have but little to eat and to drink, and give to others who have never heard of any theory of alimentation, wholesome food in abundant quantity, and every intelligent reader will perceive whose appetite and digestive functions will be exercised to the best advantage.

Let any one study the principles of optics merely in books and in descriptions; let him learn by heart all the theories of colors, but let him never see any color, nor feel their harmony. He may, like a blind man, recollect all the expressions used in painting, but without practical instruction his faculty of coloring will not improve.

Who will pretend to cultivate the musical talent only by reading discourses about the principles of melody and harmony? Is it not necessary for this purpose to perform tunes, or to hear them performed by others, either in singing or in playing on a musical instrument?

It is the same with all intellectual faculties. Each must be exercised or put into action for itself. Thus, to cultivate the power of Numeration, the numbers must be shown in real objects. To exercise the power of Locality, it is not enough to know the names of each town, river, sea, &c. but their respective situations must be acquired. Some children easily recollect names and geographical descriptions by heart, but feel great difficulty in learning local situations; while others present to themselves, in their own minds, an exact image of localities the names of which they have forgotten. When children are obliged to trace maps, it is not always those who know the localities best that have the greatest power of tracing them on paper. The fundamental faculties must be separated in every study. In geography, for instance, a perfect knowledge requires the exercise of Individuality, of Form, Size, Locality, and Language. In order to draw maps, Constructiveness is required in addition. The latter power will be assisted by Order and Numeration.

The intellectual faculties of man have improved less by education than they might have done, in consequence of two reasons, first, of the primitive powers of the understanding not being known; and second, of the difference between sensations and perceptions on the one hand, and the artificial signs, either sounds or figures, which express them, on the other, not being attended to.

To proceed as if artificial signs could produce sensations and perceptions, while they can only call those ideas into recollection which have pre-existed in the mind, does incalculable harm. The old system of education however, is conducted in this faulty manner. Children learn and repeat words without meaning, like parrots. But it ought to be admitted as a general principle, in communicating every kind of positive knowledge of the external world, that, first, sensations and perceptions must be excited, and these then denoted by particular signs. In that way only we shall avoid the great mistake to which we are accustomed from infancy, viz. of pronouncing words without knowing their signification.

The vocal or written signs are to be used only as means of communication, of recollection and tradition; but they cannot be considered as the cause of any idea or sensation. On the other hand, each intellectual faculty must be exercised by practical application, in the same way as the sense of hearing is exercised by hearing, that of smelling by smelling, that of sight by seeing.

With respect to the Feelings, education is still more defective. It is commonly believed that it is more difficult to cultivate the propensities and sentiments than the intellectual powers. It is even said that the feelings cannot be taught. This proposition, however, is not clearly stated. The

feelings cannot be taught, if by this proposition we mean, that they may be given by education; in this sense also understanding cannot be communicated. Both intellect and feelings are innate or given by the Creator, but the latter may be exercised in the same manner as the intellect, not by the action of the faculty of language, or by learning signs, or by exercising the verbal memory, but by putting the feelings themselves into action. I even think that it is much easier to exercise the feelings than the intellectual powers.

It cannot be too frequently repeated, that the Feelings do not result from intellect, any more than intellect is the result of the feelings. No one is benevolent, just, timid, courageous, haughty, or affectionate, in proportion to his understanding, nor has he penetration on account of his feelings. Moreover, each affective, as well as each intellectual faculty, must, and may be exercised for itself. Man learns to be courageous, circumspect, ambitious, just, or benevolent, as he learns to sing, to calculate, to measure, to speak, and to reflect. When often exposed to danger, he learns to meet death without fear. By habit he becomes indifferent to destruction. The heart, as the Chinese proverb states, goes farther than understanding.

Thus, bring men into favorable situations, calculated to call forth their feelings, and these will

be strengthened. In order to cultivate benevolence, one should not frequent only the society of rich and opulent persons, and learn by heart descriptions of charity; he must experience misery himself and contemplate the painful situations of others. There are more poor willing to give charity from their necessity, than rich from their superfluity. If all our whims and fancies have generally been satisfied, the feelings of conscientiousness and benevolence towards others are less excited, than if our wishes have been contradicted and reformed. For the same reason moral feelings will not improve by frequenting places of debauchery.

The principle in question explains the ancient proverb; *verba movent*, *exempla trahunt*, and also the great influence of bad or good company. Society, however, cannot be, as it is often considered, the cause of any faculty; it presents only an opportunity to the innate powers, to act, or excites them to do so.

The knowledge of the means of exciting the powers is very important, but not better understood than the fundamental powers themselves. It is time to abandon the immense error, that words and precepts are sufficient to call internal feelings and intellectual faculties into active exercise. Gospel-preaching is infinite, but many of those who deliver exquisite sermons are too often

obliged to add: Do what I say, and not what I do. Now, if they themselves show no faith by their works, how can they expect others to do so? Let education be practical, and the means of excitement adequate to the innate dispositions. Bold children will reap advantage from being brought up alone, but timid ones must be early accustomed to the society of strangers. Obstinacy will increase by unseasonable vexations, while just and quiet resistance or mild treatment may suppress it. The feelings are rather moved by a dramatic representation than by a monotonous sermon. The sight of a person wounded, or in danger, makes a greater impression on the mind, than reading that thousands have been killed in a battle. Natural language, in general, has more effect on the feelings than artificial signs. We are, for instance, more likely to smile or laugh on looking at a gay face, than on hearing the word gaiety mentioned.

The effect of external impressions on internal faculties is proportionate to the assistance which the external senses give to the internal faculties. I refer particularly to what I said of the mediate functions of the external senses, in vol. I. of Phrenology. In that way, the influence of religious ceremonies on common people, is easily explained, and ought not to be overlooked. Music, and representations of objects and facts in paintings and sculpture, may excite various kinds of feel-

ings, the inferior as well as the superior.—It is true, that these means may be and have been abused; but I think it wrong on that account to reject them altogether. Let the impressions on the senses be adapted to the feelings we wish to excite, and these will be exercised. Church-music certainly should be different from that of the ball-room, but music itself ought not, therefore, to be considered as useless in the inspiring religious feelings. By means of music, the soldier may be incited to fight, and the Christian to adore his CREATOR. The great point is, not to confound the means with the aim, and not to consider the first as the second. Religious ceremonies are nothing but means to become morally good; and if they do not tend to that purpose, they lead us into error. The practice of them will not improve the moral conduct any more than learning the commandments by heart will do. It is also true that the effect of music is different in different individuals; but it is a great instance of ignorant bigotry and intolerance in persons to exclaim against its use in religion, because they themselves are unfortunately insensible to its charms.

I shall add a few remarks on the artificial signs: they are oral, viz. pronounced, or written and printed. We commence with learning the oral or vocal signs. Their number increases in proportion to the activity of the innate faculties of

the body and mind, but children ought not to be taught to pronounce any word, without learning at the same time to understand it.

As every family has not the means of giving sufficient education to their children at home, they send them to schools or colleges, to be instructed. Public institutions, in consequence, ought to be established, with a view to give notions first, and signs afterwards, in proportion to the notions acquired. It is evident, that the objects to be taught must vary, according to the situations of the scholars, in future life, whether they be destined for agriculture, commerce, or any of the learned professions. Articles which compose the first necessaries of life, the most common objects and events, Forms, Measures, Weights, Colors, Coins used in the country, the general division of beings into minerals, vegetables, and animals, the great and common phenomena of nature, &c may be taught every where. Those notions which are particularly interesting to country people, such as the rearing of cattle, or cultivating fruit-trees and other plants, &c. may be given where necessary. Every kind of information given should be practical and useful. Whatever is spoken of, should be shown in nature, since it is useless to speak of things which children have neither seen, heard, felt, tasted, nor smelt. They cannot know any more of them than those who are born blind do of colors. The feelings also ought to be exercised

as far as they are necessary ; but it is not enough to *speak* of Charity to teach it ; teachers must excite that feeling by their own example ; and children must be accustomed to practise that virtue.

In the practical way, an immense number of useful notions might be given to children in a short space of time. Their intellect shows a great tendency to acquire positive knowledge, while teachers, in direct opposition to nature, very absurdly torment them with words without meaning, or with things they cannot understand. Spelling and reading seem the only points which teachers mind, hence the great number of school-books of that description. Teachers however, should be most anxious about children learning to think and to understand what they say and read, instead of repeating, like parrots, phrases and sentences. The school-books ought to be composed in reference to ideas to be communicated to the young mind, whatever is unintelligible or cannot be explained, is not only useless but accustoms the reader to use signs, without meanings, and to read without thinking.

As in teaching languages or vocal signs, it is essential to combine notions with words, and to show that the latter are merely signs, so, in teaching words, the whole grammar of the mother-language might be taught. Children will understand the meaning of substances, or that each being has a name was ell as each substance, each

form, dimension, color, &c. They may learn, at the same time, the qualities of objects, and words which express them, or the adjectives. Their attention may also be directed to the different degrees of the adjectives. In proportion as they become acquainted with phenomena, or facts, the verbs may be explained. The different kinds of notions, too, may be pointed out, and children may thus become acquainted with the primitive powers of man, without any peculiar study.

Those who are advanced in the acquirement of notions, and of words or spoken signs, may begin to learn written and printed ones. They will then compare the latter signs with the former, or with the sounds of which they have already acquired some knowledge. Among the printed and written signs, first, are to be learned those which are employed to express constantly the same sounds; in the German language, for instance, *a*, *o*, *u*, *b*, *d*, *g*, *l*. *m*, *n*, *p*, *s*, *w*, *&c.*; then the signs which are different, but express the same sounds; as, in the German, *x* and *cks*;—*f* and *v*;—*i* and *y*;—*z* and *tz*:—finally, the signs which designate different sounds, such as in the German *c*, *e*, *h*, *&c.* When the printed and written signs of single sounds are known, then those of compound ones may next be taught.

To assist the power of language, the facultie of Individuality and Form are usually employed

at the same time. The figures of animals are marked under the letters of the alphabet ; an Ape, for instance is placed under A ; a Bat under B ; a Cat under C, &c. ; yet no animal should be named that is not perfectly known to the children who learn the signs. It would be desirable, however, to exhibit the animal itself, where it is not familiarly known.

In this proceeding the fundamental powers of language and configuration are obliged to learn each two impressions : two forms and two names, for instance, A and Ape, C and Cat, &c. I therefore would advise to teach only the written or printed signs, without bringing them in connection with objects ; but I would, at the same time, when they learn the printed signs, exercise their fingers in copying the letters of the signs, or what is the same thing, in writing them in sand, as is the practice in the schools of mutual instruction. The advantage of the other method is supported on the effect of association. But those who are taught in this way, and have the power of configuration very active, may be impeded in reading, because they attach to each letter the object they have learnt in its connection ; and in order to read fluently, they must unlearn what they were obliged to learn at the beginning.

It is clear that the printed and written signs or letters in any language, ought to be formed in the

same manner. If both sorts of signs are different, as in the German language, a useless difficulty is created.

The printed and written signs should be taught in the same order as the sounds are communicated, and a sign should never be taught without indicating the idea that is expressed by it. We ought to begin with learning the single letters; then to go to monosyllables, and by degrees to polysyllables; and these should be pronounced without spelling and compared with the printed and written signs. Ale, Ape, Bed, Bank, Cat, Cold, &c. —Apple, Bacon, Body, Bitter, &c.—Appetite, Candle-stick, Candle-holder, &c.

As we are accustomed from infancy to connect sounds with the printed and written characters which represent them, we never see the latter without repeating at the same time the former. Did we never learn sounds, without acquiring at the same time a positive knowledge of the things they express, we should always think of the related notions when we heard or saw the signs, and then learning would be much more agreeable, easy, and profitable.

The same proceeding is necessary with respect to both the intellectual and affective faculties. As we ought to perceive the external objects indicated, before we learn the signs of them, either

vocal, printed or written, so we ought to experience the feelings first, before we learn the words by which they are expressed. Hunger and Thirst, Warmth, Cold, Anger, Fear, and all other emotions must be felt before their signs can be fully understood. The natural language alone is proper to communicate the meaning of expressions which denote the affective powers of the mind. The natural language deserves a particular attention in the cultivation of the affective powers. It excites them much more than the artificial signs can. If a teacher should instruct girls about polite manners, whilst he himself is awkward and sets before them his legs stretched out over a chair, the theoretical lessons will be of less influence than the example which strikes the eyes. If another speak to boys of peaceableness and forbearance with an abrupt and commanding tone of voice and with sharp haughty features, he puts rather combatically and self-esteem than benevolence and reverence into action. It is a rule to speak the natural language of any feeling, you wish to inspire or to excite, and without doing so, the artificial signs are of little consequence. You may be silent and dumb, and yet distinctly speak to the feelings by natural signs. If education be conducted in this way, moral and religious principles will produce more effect on mankind than they have done hitherto. Then the moral faculties will be called into action, and our efforts to cultivate the mind will not be limited to the pow-

er of language only, viz. to that faculty which learns by heart artificial signs.

Ignorance of the fundamental powers of the mind, and of the means of exercising them, may be observed in all the institutions of society, and in all branches of mental education. Classes for younger children and whole universities are conducted according to erroneous suppositions. The greater number of teachers agree that the reasoning power ought to be exercised in every individual; but what shall be done to accomplish that end? Perhaps we see one man of great depth of mind who is eminent as a mathematician: the inference is immediately drawn, that every child ought to study mathematics, in order to acquire great reflecting powers; and not even the theologian is to be excepted, as if mathematical and moral reasoning were founded on the same principles.

Another person also endowed with great reasoning powers is perhaps a great philologist, and particularly an excellent Greek and Latin scholar: therefore, every one is compelled to learn Latin and Greek, with the view of giving him a powerful mind, as if learning words and phrases were the same as acquiring sensations and perceptions of all kinds, and reasoning on them. Happily the time of sophistry is past, and positive knowledge is now esteemed. Experience shows, that

philology and mathematics do not improve arts and sciences, nor the moral character of man.

It is replied, that the great mathematician and the great linguist, excel by their philosophical minds. This is certain ; but they did not become good reasoners, one by studying mathematics, and the other by learning Latin and Greek. There are great philosophers who cannot become great mathematicians, nor great linguists. It is true that the mind must be drilled and accustomed to reflect ; but I deny that this can be done only in Latin or Greek, or in the study of mathematics. The reflective powers of man are fundamental, and may be employed in prosecuting any branch of knowledge, in the study of natural history, zoology, geology, chemistry, phrenology, &c. ; and whoever excels in any line by reasoning, must possess them in a higher degree ; but they are by no means the exclusive attribute of mathematicians or philologists. They may be applied to any kind of notions and always with most advantage to the perceptive powers of which are most active. Now if an individual have calculation or language small, he cannot acquire a great stock of notions of that mind, and his reasoning powers will rather be impeded by the study of mathematics or the classics. It certainly would be astonishing, if some talented individuals could not excel in various kinds of knowledge and be at the same time good classical scholars. The plurality

of the mental powers and their combinations ought to be better understood, and mental discipline which I allow to be necessary, may be arrived at by cultivating various kinds of knowledge and in combining them with reflection.

In the same way, as each faculty exists in itself, and may be combined with others, so each may be exercised alone or in connection with others. We may exercise the faculty of Form, Size, or any other, without learning signs to denote our ideas ; and we may learn signs by heart, without understanding their significations ; or Language may also be exercised at the same time with other faculties. Yet it is useful to put into simultaneous, or closely successive action, all the faculties which have a mutual influence on each other. In this way they excite each other mutually. This rule explains the whole doctrine of Mnemonics ; that is, the activity of one power excites that of one or several others. In the next chapter, this proposition will be more fully detailed. Here, my principal object is to fix the attention of teachers upon the great fault of confounding together signs and ideas, or of thinking that mere words can produce notions.

School education after the monkish and old fashioned system, begins with teaching printed and written signs, without explaining their significations, and even the instruction we commonly

receive in colleges, is more a communication of signs than ideas. Youth are admired and rewarded in proportion as they know signs. How glorious is it for a boy to know how to communicate the same idea in Greek, Latin, perhaps in Hebrew, or in many modern languages!

Some speak of the delight they experience from reading the classics. This may be with those who have great facility of learning languages. But it is certain that, generally speaking, the study of the dead languages is extremely tedious for the greater number of pupils. Lord Byron stated it in reference to himself. I am convinced, that thereby many children become unwilling to learn things to which they would have attended with pleasure, had they been taught them in their own language in a practical way. Many others are drilled by indefatigable pains to become classical scholars, and nevertheless fail to distinguish themselves. Some good Latin and Greek scholars, when they come to practical business, are left behind by fellow students, who at school were undervalued. The quantity of Latin words crammed into the heads of the students, does not give them the primitive power of reflection, nor does it serve to cultivate attention to practical life. On the contrary, that constrained method of studying, renders their conceptions slow and indolent.

It is also said that those who know Latin and Greek generally express themselves with more clearness than those who do not receive a liberal education. It is indeed natural that those who cultivate their mental powers, write with more clearness than the uncultivated individual. The mental cultivation, however, may take place in the mother tongue as well as in Latin or Greek. Yet the spirit of the ancient languages, further is declared to be superior to that of the modern. I allow this to be the case, but I do not find that the English style is improved by learning Greek. It is known, that literal translations are miserably bad, and yet young scholars are taught to translate, word for word, faithful to their dictionaries. Hence those who do not make a peculiar study of their own language, will not improve in it by learning, in this manner, Greek and Latin. Is it not a pity to hear, what I have been told by the managers of one of the first institutions of Ireland, that it was easier to find ten teachers for Latin and Greek, than one for the English language, though they proposed double the salary to the latter? Who can assure us that the Greek orators acquired their superiority by their acquaintance with foreign languages; or is it not obvious, on the other hand, that they learned ideas and expressed them in their mother tongue?

It is farther said, that it is interesting to know Latin and Greek, in order to understand the ety-

mology of modern languages. This is true, but, with this view, the English ought to study also the German, Dutch, French and Danish, since their language is composed of words borrowed from all these nations.

I am persuaded that the advantage does not repay the trouble of prosecuting such studies, and that they occasion an enormous waste of time and labor. I had rather learn ten ideas in a given time, than ten different signs which express one and the same idea. We should never sacrifice positive knowledge and reflection to the acquisition of a variety of signs. We should begin to acquire notions and that language which is the most necessary for us to converse in. When I was examined, in order to my becoming a licentiate of the college of physicians of London, it would have been more suitable to have inquired whether I spoke the English language sufficiently than whether I understood the Latin, the English being indispensable to the practice of medicine in and about London, whilst no physician examines his patients in Latin, any more than a barrister defends his clients, or a preacher exhorts his congregation in that language.

It is said, that a man who knows Latin, has received a liberal education ; yet it is a lamentable thing that we should pretend to judge of a person's useful attainments by his knowledge of an-

cient languages. I wish that the medical profession may be cultivated by men of superior talents, but I hope that a knowledge of Latin and Greek will not continue to be the touchstone of deciding who is, or is not, fit for practising this difficult and important art. Few surgeons and physicians, who are good classical scholars, will, from that circumstance, equal JOHN HUNTER in useful knowledge, and in improving the healing art; and yet he was not prepared by the study of ancient languages for the excellence he attained. He had not the advantage of having received a scientific education, and hence his writings want clearness of expressions, but he might have acquired the art of writing in a well conducted English high school. It may be also remarked with respect to Shakspeare, that he did not become the great poet, he was, from being a great classical scholar.

We seldom learn to speak Latin and Greek, or we soon lose the habit of doing so. Thus, we learn these languages in order to understand the contents of ancient books. This is well, but then we ought, for the same reason, to study all modern languages; at least, to act fully up to this principle, medical men ought to take that trouble, since, beyond doubt, all branches of natural history, anatomy, physiology, and pathology, are more advanced now than they were at the time of the Greeks and Romans; and, of course, more knowledge is to be obtained on those subjects from pub-

lications in the modern languages of Europe, than in the languages of Greece and Rome. Formerly, when scientific books of all nations were published in Latin, a knowledge of it was necessary; but since the works of every nation appear in the mother tongue, the same degree of importance can no longer be attached to it. Not every one is obliged to learn Hebrew though he is exhorted to read the Bible, that is in its translation. Further, if men of science be contented with extracts and translations of modern works, why should it not be the same with respect to the ancient? Moreover, the greater number of professional men, who are much occupied in practical life, have scarcely time to read what is written in their own language; their knowledge of Latin and Greek, therefore, is quite useless to them and to the art.

Once I heard it stated that the classics contribute to the refinement of our feelings, but it should be singular, if we could not feel without knowing Latin and Greek. The erroneousness of such an assertion is evident and does not require a more detailed refutation. It is also remarked that translations are inferior to original words in Latin and Greek, in the same way as the French language cannot express Shakspeare's thoughts and conceptions. This cannot be said of the German language, and I do not say that Latin and Greek should not be studied at all. I willingly allow that every one who has the natural talent and

leisure, may study the ancient languages, as Latin, Greek, Hebrew, and ancient as well as the modern, if so inclined, and grant him his hobby; I only maintain that a knowledge of them ought not to be required as indispensable from every student; and it seems to me particularly unwise to begin our preparatory and college education with them, and to lose so much time and labor which might be more usefully employed.

It is replied, that childhood is the most fit period for learning languages,—that children must be trained up to the tedious study of ancient tongues, because, at a later period, they would not submit to the same trouble. This proposition is supported by no authority, except that of the prevailing opinion, that the study of Latin is a necessary accomplishment; it falls to the ground as soon as we feel its uselessness. It is undoubtedly true, that youth is the fittest period for learning languages, but let us learn those first which are the most important to our future life. Now, the modern languages appear to me to be the most useful. Above all stands our mother tongue; we ought, therefore, to begin with it. The parts of speech are the same in all languages, and may be learnt in the modern as well as in the ancient. I am quite grieved to see that many young ladies aim at such accomplishments, whilst they entirely neglect every kind of knowledge indispensable to their future destination as wife and mother.

One should imagine that, in civilized life the only duty of the female sex consists in useless amusements and by no means in the fulfilment of important functions. I leave this subject to the consideration of all those who interfere with education and the direction of academic studies. Some may think that I have entered into too many details, but the importance and great influence of this matter will plead my excuse. I am decidedly of opinion that in this respect Education stands in need of reform. It is, however, said that a mother may assist her boys in acquiring a classical education. This remark again supposes that all boys ought to learn Latin and Greek, and that on account of the first error we must commit a second. Yes, a mother ought to attend to the first education of her boys and to that of her girls entirely, but let useful knowledge precede that which is merely secondary. There may be single individuals among girls who have a great disposition to learn languages, let them exercise their talents, but let them not be a standard for girls in general. I am sure that few of them, as well as of boys will be greatly delighted with the study of classics. On the other hand I doubt that on account of this acquirement, girls become better wives, and better mothers, and that they will, for this reason gain the affection of their husbands. Rich and independent females certainly should be occupied, and if they be married without having children, some may be entertained by the study of lan-

pages ancient and modern. No sensible man will object to this. The question is only what shall be the general rule and what be exceptions. It, however, still seems to me that men and ladies might become more useful to their fellow-creatures and more meritorious by other occupations. The exertions of Mrs. Fry have been more beneficial to her fellow-creatures, than the classical knowledge of her whole sex in the united kingdoms of Great Britain and Ireland.

In the same way mental arithmetic may be important as far as calculation of the result is concerned. It may be acceptable to those who found morality on a book and a basis as utility and expediency. But I do not see that it contributes to feminine gentleness, or to strengthen the nobler sentiments any more than Latin or Greek increase the love of truth and the feeling of conscientiousness. Let it then occupy only the time necessary to its practical usefulness. I might also wish to be apprised what useful knowledge young ladies acquire from reading a short course of mental philosophy. Probably the same which little children in nursery-schools obtain from reading and learning by heart parts of the Bible containing parables and doctrinal points which divide the different sects of Christians. Can metaphysicians themselves make any practical application of these doctrines? —What is age? useful knowledge: what is age? wisdom?

The second principle of exercise is, that the primitive powers are not to be confounded with their application ; each power being always the same, but its applications and modifications infinite, according to age and external circumstances. Inattention to this difference, produces more bad effects than many persons suppose. They complain, for instance, of the vanity of adult persons, while they continue to nourish this feeling in every child they meet with. He who knows that the Love of Approbation is a fundamental feeling; that it exists in different degrees of strength in different individuals, and that exercise increases its activity, will not excite it too much in infancy, for fear that, in later life, it should produce abuses. He will perceive, that flattery of every kind excites this sentiment ; that praising a child for his figure, his hair, his voice, his clothes, his manner of dancing, &c. will put into action, and increase his love of approbation, and prepare for him a source of misfortune. A looking glass and curls of hair, ear-rings and bracelets as well as titles nourish this feeling. Irascible children should not be permitted, and still less encouraged, to beat their playthings, against which they hurt themselves. As equity was a principal object of the Areopagus of Athens, that virtue was considered as indispensable in the members in all situations. He who killed a bird that looked for shelter in his house could not become a member ; and a member who played on a word, was degraded,

because such a practice might do harm to truth. How inferior, nay puerile, is the behaviour of some modern legislators! Those who are faithful in little things, says Christ, will be so in great. Thus particular vigilance ought at all times to be observed not to cultivate to excess the propensities and sentiments of children, which may in after life render them unhappy or impede their moral conduct. On the other hand, they are wrong who neglect to cultivate any feeling or the faculties of the fine arts, because disorders may and often do result from them. This also happens with acquisitiveness, and with every fundamental power, each of which, however, is given to a certain purpose. In admitting that every one is answerable for the talents he has received, it is evidently our duty to cultivate the fine arts, as far as they are in harmony with all other faculties. Superstition undoubtedly degrades a reasonable being, but the human character is ennobled and the charms of society increased by respectfulness. There can be no doubt that in attending to the difference between primitive powers and their application, between their legitimate actions and misapplications or disorders, many errors hitherto committed in education will be avoided. Ladies want bodily exercise, but it is a mistake to make them march like soldiers. Since no female will gain the affection of a gentleman by a soldier-like manner of walking. Her movements should be graceful and gentle.

The third principle of exercise is, that the order of instruction ought to follow the order of nature, in bringing the faculties into activity. Children acquire notions before they make themselves acquainted with signs to indicate them. They know the objects themselves sooner than their qualities and mutual relations; they know the qualities of those objects sooner than the modes of their actions. Accordingly, their language begins with nouns, and verbs in the infinitive mode. By degrees, they learn signs to indicate their acquired notions of other kinds. Their language, then, evidently shows, that their faculties do not appear simultaneously. It is, indeed, an important point in education, to know that the faculties of the mind begin to act successively, viz. in proportion as the organs on which their manifestation depend are developed. Hence, they ought to be exercised in the same order; and the knowledge of the periods of developement of the respective organs, is as necessary as a knowledge of the functions of the primitive faculties; because it is certain that no faculty can be exercised without the assistance of its organ. This principle is general in organic and animal life.

It may be here considered, that education, as far as exercise goes, begins earlier in life than is commonly believed. The vegetative functions, the hours of sleep, of appetite, of the urinary and alvine excretions, may be soon regulated.

Children are easily accustomed not to fall asleep, except when carried on the arms or shaken in a cradle. They begin to make acquaintance with the external world when a few weeks old. It is by degrees that they taste and feel, hear and see; that they learn to distinguish their nurse, or those who take care of them, from strangers, and the existence of external objects. When they become attentive to the things around them, we ought to show them repeatedly a great number of various objects, and exercise as much as possible their external senses. They are soon tired with the same object, but pleased with new impressions, as is the case also with the greater number of adult persons. Thus, it is not a matter of indifference, whether a child be carried quietly on the arm, or whether its attention be excited towards external objects. I consider it as very important in whose society young children are kept; not that I think that children absolutely acquire the character and talents of those who are around them, but because their society will be favorable or unfavorable to the exercise of the innate dispositions.

The periods when the innate powers appear, increase, decrease, or disappear, are of great importance. Some are active early in life, and continue longer than others which appear later. Now, the powers will be cultivated with the most effect at the period of their natural activity.

There is some regularity in the appearance and disappearance of the faculties, yet there are many exceptions and modifications, as in all natural operations. Nature is immutable only with respect to the relation of cause and effect ; but she modifies the phenomena in infinite varieties. It happens usually, that those powers that act strongly, appear early and last long. The intellectual faculties and several feelings, commonly decrease in old age. Several persons, however, are particularly fortunate in preserving the energy of their mind to a great age ; but the greater number of old people are deceived, if they take themselves to be still what they were when young.

Among the intellectual faculties, those of individuality, form, eventuality, comparison, and language, appear first. Children soon know many individual objects and facts, and conceive general notions ; they call, for instance, every young being, child. Then the faculties of size, coloring, locality, number, order, time and tune, appear successively. Objects and their phenomena ought to be taught first, and afterwards the qualities of objects and their relations.

Among the feelings or affective faculties, those of attachment, cautiousness, love of approbation, acquisitiveness, combativeness, secretiveness, destructiveness, firmness, benevolence, conscientious-

ness, and imitation, are very early active. Those of reverence and amativeness appear much later.

Let it not be forgotten, that from the earliest age, the feelings, as well as the intellectual faculties, may be educated, and that young children show no less difference in their characters than in their talents. They are patient or obstinate, indolent or lively, timid or courageous, attached to, or careless about others, &c. Let those powers which are naturally too active be quieted, and their activity prevented; while those that do not act with energy enough, ought to be excited in a practical manner. As imitation is particularly active good examples and the best impressions of all kinds should be given.

In treating of the vegetative laws I have stated, that very young children ought not to be obliged to sit still in an apartment all the day, as is sometimes the case in common school education. Particular places, in healthy situations, might be instituted, where children could come together to play, and at intervals to learn things in nature, and their names, objects and their qualities, instead of sending them out only to take a walk, or to breathe pure air. Parents might thus have the advantage of having their children kept out of harm's way, and the young creatures themselves would not be compelled to suffer the distresses necessarily experienced when restrained from mo-

ving their limbs, nor be tired by unprofitable learning. They would be pleased with acquiring the knowledge of things and of words to express them, and at the same time, they might be accustomed to order and obedience. They will also learn the signs which express the feelings, and their relations, in proportion as the feelings are excited in themselves. Gymnastic exercises might and ought to be combined with mental instruction. The principal object of such schools should be bodily strength, order, cleanliness, notions of things, and oral signs.

The schools for young children in Mr. OWEN's establishment at New Lanark, first exhibited, to a certain extent, the practical application of these principles in uniting physical and intellectual education. The infant schools since introduced in London and in the rest of Great Britain do the same; and no one can observe the happiness and intelligence which reigns among the children there, without wishing this mode of instruction generally adopted; though it may be still improved and more adapted to the nature of man. Unfortunately for the young beings this mode of instruction has already degenerated from its first plan. Many teachers find it too difficult to adapt themselves to the children. From habit, and perhaps from commodiousness, they prefer to keep them quiet and to teach them A. B. C. and spelling rather than to satisfy the active dispositions of the young minds. Whoever takes interest

in the improvement of education, should first think of means of forming teachers.

The fourth principle of exercise is, that it must be proportionate to the innate dispositions. Too much activity weakens or even exhausts the faculties, both feelings and intellect. This explains why too early geniuses often become ordinary men when grown up; why the mental operations, when too active, are frequently deranged, and why it is necessary to keep up the balance between body and mind, and between the individual faculties.

The brains of delicate children and premature geniuses ought to be exercised late, and the greater their mental activity is, the less it needs to be exercised; and the more care is to be taken of the body and the physical education.

It is also very important to know, that during the climacteric years, when the body increases most rapidly, the mental powers are weaker. Hence, at that period, the body deserves greater attention than the mind. The mental faculties will resume their activity, when the body has acquired its solidity.

Increased or diminished energy is dependent not only on the periods of growth, but all powers are liable to be occasionally more or less fatigued.

No power is always equally active, each requires rest. It is, therefore, advisable to exercise one power after another and to allow to children sufficient sleep. As any faculty, if too much excited, is injured, or even exhausted, so is it weakened if it remain too long inactive. Teachers may easily perceive the disadvantages of too long a cessation from study in the effects of vacation on their pupils. These latter always find some difficulty in returning to application and order. Intermission is necessary as well as exercise, but neither ought to be of too long a duration. They are relative, and education requires to be amended in this respect. A long vacation is more favorable to the teachers than to the students. The former, it is true, want rest, but they might alternate, for the same reason as the objects to be taught must be changed from time to time. Education should never be tedious, nor too long interrupted ; different faculties should be put successively into action, which produces a kind of relaxation, and sufficient care ought always to be taken that the bodily constitution does not suffer by pressing too keenly the progress of mental instruction. Children, who return for months to their family, are rather spoiled, during that time, than improved in order and obedience. They are indulged in their caprices, and see conduct practised in direct opposition to what they are taught at school to regard as meritorious. The frequent and long interruptions of practising the theoretical rules, prevent them from becoming

altogether accustomed to them, and they wish for nothing more earnestly than that the time of learning might be over, to be permitted to act in opposition to what they have been taught, and to forget the ideas they have had so much difficulty in acquiring.

The fifth principle of exercise is, that its influence will not be the same on every individual, on account of the innate dispositions. Even different children of the same parents, and brought up by the same teachers, turn out quite differently. Indeed the fact, that the dispositions are innate, cannot be insisted on too much. We must say with HUME, (Essays on Morality, 3rd edit. p. 93.) that the influence of education would be miraculously great, could it but create one sense, and that this miracle is reserved to our Maker; that education may cherish and improve the plants of nature's formation, but cannot introduce any original plant. HELVETIUS, who considered man as the result of education alone, was obliged to allow that "une folie passée rarement éclaire les hommes sur une folie presente." MARCUS AURELIUS calls little politicians, and compares with children, those who maintain that whole nations might be changed into philosophers. He was satisfied by being able to contribute in a slight degree to common welfare, and to improve a few persons. He denies the possibility of establishing PLATO's republic. He in particular insists on the importance of making

any new idea popular. He adds, that without this precaution the success is impossible, that absolute power and lessons remain without effect, if the manners of the people do not change ; that in this case, nations are but slaves, and complain of restraint, or are hypocrites, and feign to be persuaded.

It is more easy to cultivate the lower feelings, since they are naturally stronger in mankind ; in the same manner those who are virtuous by nature will sooner learn to practise moral principles than those in whom the lower propensities predominate. Those who have little conscientiousness will with great difficulty learn to be just in a higher degree, in the same way as those who possess any intellectual faculty in a small degree, will never excel in it. The greater the disposition, the greater the effect of exercise ; yet it is always true, that a proper degree of exercise strengthens the functions of each power.

The preceding considerations on exercise afford an opportunity of speaking of the method of mutual instruction. It is inconceivable how its advantages can be contested. I rather excuse those who contend for the beneficial effects of ignorance, and who object, that mutual instruction is a means of teaching in too short a time, than those who acknowledge the benefit of general information, and yet hesitate to employ this method. Its supe-

riority is too evident to be long impeded by its novelty.

It is my decided opinion, that this method ought to be used in all branches of knowledge, which may be acquired by the influence of teachers, or which may be taught. Even those who are destined to improve arts and sciences will gain by it. The reason of this is very simple, and founded on the influence of exercise; while at the same time this method has the great additional recommendation of being the least expensive mode of instruction. This advantage is certainly of importance, but I shall examine only the benefits which results from exercise.

If there be many children or students together, the school hours are not sufficient to examine every one. Young persons, however, who are not examined, are less attentive to their studies than those who are; their faults, not being remarked, are not corrected, and only a few are noticed. In large classes all that can be expected at present is, that the teacher should explain every thing distinctly, and repeat it with a few scholars. He addresses himself commonly to those who learn quickly. Should it happen that the master speaks to others of less talents, the better heads, knowing their lesson, cease to pay attention, or at least are soon wearied of doing so. But were the better students obliged to repeat the lesson with the others,

they would experience that we learn by teaching ; they would feel inclined to go over and over the same thing with those intrusted to them for instruction, while, in the common way, they cease to repeat their lessons, when left alone. At the same time the students of less capacities will be more attentive, and, on account of the constant repetition, they will remember what was lost at the mere explanation of the master.

Let us examine any branch of education whatever, and we shall find that the advantages of this method are always the same. We may take a mathematical problem for the sake of example. Suppose the rules to have been taught, and that they are to be applied. Those scholars who possess the mathematical talent in a high degree, will soon finish their problem, and will be obliged to wait in irksome idleness till many others, who cannot follow so quickly, have done. If the former, only, are called for by the master to resolve the problem, the others hear it, but it is not attended with the same advantage to them, as if they were called to work for themselves. If, on the contrary, the scholars, with little mathematical genius, be chiefly examined, those who excel in that talent will lose their time, and neglect what they know, while their attention would be excited if they were employed in teaching their condisciples. Their natural activity may even lead them to do mischief, whilst they are not otherwise oc-

cupied. It is the same with spelling, writing, drawing, dancing, learning history, geography, languages, in short, with every branch of knowledge that is taught.

The practise of the common method can be excused only by the supposition, that all pupils are endowed with the same degree of abilities. As, however, daily experience shows the contrary, it ought no longer to be tolerated, if the object be to take the greatest possible advantage of the period of education. The new method is particularly useful in schools where all classes of children are collected together in the same room, and where, in the common method of teaching, while one class is examined the others are doing nothing. Children are in general required to learn by themselves, but few only are capable of this exertion. According to the new method, all classes go on at the same time, and the same subject is repeated till every child knows it.

In colleges, where each class is separated, the necessity of the new method is less felt; yet, the above-mentioned reasons induce me to think, that it should be employed in all large classes, where the pupils, on account of their different degrees of capacities, naturally form themselves into several subdivisions.

The superiority of a new method, ought to determine the directors of instruction, to make a

new classification in colleges, according to the subjects to be taught. There should be one professor for each branch of knowledge ; one for history, one for geography, one for the mother tongue, one for Latin, one for Greek, one for poetry, one for mathematics, &c. The pupils who study the same branch might be brought together, but divided into different classes ; those, for instance, who study history might be in the same room, but divided into several classes. A similar arrangement should prevail among the students of Latin, Greek, mathematics, geography, &c. The professor of each branch might put all his classes into action at the same time, in the same manner as is done in the schools for children. Monitors might take his place in the inferior classes. In this way, the pupils would make more progress than they commonly do. It is not necessary to state how many professors might be instituted, for there might be as many as branches are found to be requisite. The principal object I here contend for is, that the better students should instruct the inferior ones, when the masters are not sufficient for the purpose. Emulation would induce the monitors to employ their leisure moments in learning new subjects. Moreover, the time which the masters give to explanation is short ; that employed by the scholars in learning occupies a greater portion. This portion of time will be filled up to more advantage by the method of mutual instruction, than if every one is left to himself alone ; and those who instruct others will,

in this way, derive even the greatest advantage. This method, being new, has met with adversaries; but whoever will set an example of using it in the higher branches of knowledge, will find its superiority the same as it is already ascertained to be in teaching the first elements of education. The fundamental principle implied in the method of mutual instruction, is one and the same for whatever is taught to many pupils at once. At colleges, those who are very zealous form private classes for repetition among themselves, and others who have means, pay repeaters. Every improved system of learning admits the advantage of repetition and all teachers speak in favor of numerous instructors. This is accomplished by the monitorial system. It is objected that boys do not teach soundly. I reply that in that case they are not taught or do not learn soundly. It is applicable to monitors what we may say of instructors throughout: The most learned is not always the best teacher. The head master ought to understand human nature and to choose the proper monitors. Farther if the monitorial system has failed to produce the desired result, we may say, "what is best administered is best," and not at once accuse or reject a new doctrine, or system because it is not understood. I have seen the monitorial system applied with astonishing effect. I will mention only Wood's Sessional School at Edinburgh in Scotland, where the children of the lower classes are instructed, with little expense, in

a manner which should do honor to those of the first ranks and it is done by the monitorial system.*

The principal point of the Hamiltonian system too is that of continued exercise. Numerous teachers replace the monitors ; and the same lesson is constantly repeated. The other great point of this system, which teaches to learn a language without the grammatical rules, does not seem to me equally applicable to every individual. It will however, please the great number, and in general those who attach themselves little to principles ; whilst those whose reflective powers are large, will be desirous of knowing from the beginning the rules contained in their language.

The advantage of repetition then being evident, and confirmed by daily observation, it ought to be more generally practised than it is done in public institutions. The more the pupils are examined, the more they will learn, and the clearer their notions will be.

It may be asked, whether exercising the affective and intellectual powers, makes the respective organs increase ? Each part of the body, being properly exercised, increases and acquires more

* See review of Wood's account of the Edinburgh Sessional School in the American annals of education vol. 1.

strength. The fact is known to be so, with respect to the muscles of woodcutters, smiths, runners, &c. Now, the brain and its parts are subject to all the laws of organization; they are nourished like the arms and legs. Cerebral activity, therefore, determines the blood towards the head, in the same way as the blood is carried to any other part when irritated, and this law of the organization may enable us to account for the developement of certain parts of the brain of whole nations, and to explain national characters, if individual powers are cultivated during successive generations. I can speak with certainty from repeated observations. The changes of cerebral developement when the individual powers are exercised, or kept quiet, are astonishing. In the former case individual organs increase, and in the latter they not only stand still in growth, but sometimes become absolutely smaller.

The growth of the organs, however, is not the only or even most important advantage to be derived from proper exercise, for it is certain that organic parts, such as the muscles, the senses, the brain, &c. do not increase in size in proportion to their exercise. The muscles which move the fingers of a musician, for instance, who plays on a piano forte, will acquire more facility and agility than size by the exercise. If we walk little during winter, and take more bodily exercise in the spring, we are easily fatigued at the beginning,

but, by degrees, we can make greater excursions without suffering by them. Yet the muscles do not grow in proportion as walking becomes easy. In the same way, the size of the organ of tune, or of any other power, will not augment in proportion to its being exercised, but its fibres will act with more facility.

I finish this chapter by repeating the principal points detailed in it : Exercising is the same as putting into action ;—each faculty must be exercised for itself ;—the means of exercising the powers are of great importance ;—exercise of the faculties should take place in proportion as their respective organs are developed ;—exercise must be proportionate to the innate dispositions, too little or too much does harm, but applied in a proper degree, it makes the organs increase in size, modifies their internal constitution, and produces greater activity and facility. The effect of the same exercise is different, on account of the innate dispositions of different individuals. It has been hitherto feeble particularly in reference to the moral feelings ; but it will be greater, when the innate dispositions of the mind and the laws of exercise are understood and attended to. The required reform of education must begin with forming teachers themselves. Their influence being of the first rate, they must rank high in Society and their reward ought to be honorable. This might be done by the assistance of the monitorial system,

and without increasing the general expense. There is so much zeal for education in the United States, particularly in New England, that this condition of improvement I hope will occupy the minds of American philanthropists. They will consult the American annals of education, and instruction and learn what has been done in Europe; and in some parts of the United States, and what different teachers themselves propose in reference to Seminaries of this kind.

CHAPTER IV.

ON THE MUTUAL INFLUENCE OF THE FACULTIES, AS A MEANS OF EXCITEMENT.

The fourth condition which contributes to increase the activity of the faculties, is their Mutual Influence. To employ this means it is necessary to understand, that each power may be active by its internal energy, or by its being excited by one or several other faculties; and that on the other hand, each power may be inactive either by its want of energy, or by the influence of other faculties. This consideration deserves every attention in practical education. It supposes in the teacher

who wishes to reap from it all the advantages possible, a knowledge of the primitive faculties of the mind, of the natural connection of their organs, and of the individual dispositions of him who is to be educated.

It is a general law, that organic parts which contribute to the same function excite one another. The organs of smell and taste, the nerves of hunger and thirst, and the digestive power, are in intimate connection. Smell and taste often whet appetite, and the appetite excites the sense of taste ; it is therefore justly said, that hunger is the best cook. The internal feelings are equally subject to mutual influence. Amativeness, and philoprogenitiveness, frequently excite combativeness, viz. male animals fight more when under the influence of amativeness than at other periods. Females defend their young ones with more courage than any other object. Acquisitiveness and cautiousness, excite secretiveness to act. Attachment may put cautiousness into action, or we may fear for the sake of friends more than for others. Firmness may assist hope and justice, reverence and self-esteem ; and it may be assisted by the other feelings. In short, each feeling may be stimulated by one or several others.

Mutual influence exists, also, with respect to the intellectual faculties, and is called Association of Ideas. Those persons, however, who consider as-

sociation as a primitive power, are mistaken, for the activity of at least two powers, whose functions are associated, is necessarily implied in its very existence. Now, this mutual influence takes place among the feelings as well as among the faculties of the understanding, and among feelings and intellectual faculties promiscuously ; that is, one or several feelings may excite intellectual operations, and *vice versa*.

The mutual influence of the faculties is the basis of what is called Mnemonics, or of the art of strengthening memory. This art is very ancient, but in consequence of its principles not being sufficiently understood, it has been rejected by some, and extolled to excess by others. The great errors committed in mnemonics, resemble those committed in all branches of education, and in all sorts of institutions. Teachers of every sort look upon themselves as the standard for the whole of mankind, and commonly have recourse to that faculty which is the most active in them, reproduces the most easily its anterior perceptions, and excites other powers with the greatest facility. They err in overlooking the differences of the innate dispositions and talents of different individuals.

The most common kind of mnemonics is founded on language ; that is, words recall individual notions. Written signs do the same, in bringing

to our recollection sounds and ideas ; they depend on the faculty of configuration. If we resolve upon doing a thing in a distant place, and after setting out to go there, forget our design, and recollect it only on returning to the place where the resolution was first made, the power of locality is the means of mnemonics, and many teachers of mnemonics have recourse to this faculty ; they combine ideas with places, and in thinking of the latter they remember the former. It seems that the ancient orators employed these means, in order to learn their discourses with greater facility. Their proceeding appears to be indicated by the expressions denoting the divisions of the subject, such as in the first, second, and third place, &c. This power may indeed, if it be strong, assist the other faculties. Persons endowed with it, may divide and subdivide, in their minds, a given place, and put into each compartment a particular notion, and the idea will be called to recollection, in thinking of the corner where it has been lodged. Locality, however, will be of little use to those who possess it only in a small degree ; whilst if they be endowed with the power of Form in a high degree, they will combine a notion with a figure with great facility. We may also, with other mnemonists, have recourse to several faculties at the same time, to fix the recollection of an object.

This proceeding then may be applied with great advantage in education ; but it is to be remembered, that the most active powers furnish the best means of mnemonics, and that any particular mode of association useful to one may be useless to another, on account of the differences in the innate faculties. The general rule is to exercise, at the same time, as many faculties as possible in combination with each other, and even with the senses. The activity of one or several faculties, may excite the peculiar action of mind we wish for. The smell of a flower may recall the place where we perceived it first, or many particular circumstances connected with it. The powers of Comparison and of Causality, are often usefully exercised to this purpose, particularly in persons who cannot learn by heart what they do not understand. Others who have Imitation and Ideality large, recollect easily things expressed with ideality. Every one remembers best those phenomena, or those points in history, which are in the most intimate relation with his strongest feelings and intellectual faculties. These faculties enter into action with the greatest facility, reproduce their sensations, that is, appear as memory, and excite the other faculties.

The strongest illustration of the effects of mutual influence among the faculties, is to be seen in the effect of emulation in children, and the desire of distinction among men. Many students learn

more, in consequence of excitement produced by emulation, than by the innate activity of their understandings. The love of approbation, indeed, may excite every other power. Soldiers do not always behave bravely, from the desire to fight alone; but sometimes they do so from love of glory. Some men of talents ruin their health by continued study, as frequently from a desire of distinction as from a strong passion for the study itself.

Acquisitiveness, or the desire of gain, is another great cause of excitement of other faculties. Its influence, and that of the Love of Approbation, are of such power, that many philosophers have considered these two motives as sufficient to explain all particular manifestations of the mind. But however strong their energy may be, they never produce powers, they only excite the innate faculties to act. This fact ought to be specially attended to in education. It is understood by phrenology. If two boys possess the same natural endowment of the faculty of Language, but the one double the Love of Approbation of the other, he, by the influence of the latter faculty, may be rendered the more excellent scholar of the two. But if the Love of Approbation is equal in both, he who possesses Language naturally more powerful, will undoubtedly excel.

The mutual influence of the faculties being also a means by which we may direct their employment, I shall enter more into detail on this subject in the next Section, where I speak of the Motives of our Actions.

From the considerations unfolded in the preceding Chapters, I draw the conclusions that Education ought to be founded on the knowledge of Man ; that the true principles of education ought not to be confounded with school-learning ; that great improvements remain to be made even with respect to instruction in arts and sciences, and that the education of the Feelings, which I consider as the most important, and place far above that of the Understanding, will require to be quite newly modelled.

It is admitted and stated in the Preface, that several views developed in this work are not new, but there is a difference betwixt knowing a fact, and knowing the principle of it, and Phrenology alone can reduce to a science and system the isolated observations which had formerly been made. This assertion will be farther confirmed in the following pages.

SECTION II.

ON THE DIRECTION OF THE FACULTIES.

After having examined the conditions which contribute to the greater or less activity of the mental faculties, I shall consider the direction which ought to be given to their actions. In the same way as, in the first Section, I held it established by Phrenology, that all dispositions are innate, and that their manifestations depend on cerebral parts, called organs; so I suppose here, that my ideas on the moral nature of Man, as detailed in the second or philosophical part of Phrenology, are known. Phrenology shows that there is a natural arrangement among the faculties, and this circumstance is the foundation of the moral character of Man. To understand fully the ideas unfolded in this Section, it is also necessary to be acquainted with the sphere of activity of each special faculty of the Mind, and with the modifications of their manifestations. This information likewise is communicated in the volumes on Phrenology.

In employing and directing the faculties of Mankind, we ought to proceed according to fixed and ascertained principles; the first and most important of which is, That human actions are objects of moral regulation: The second is, That each faculty has a tendency to act: The third concerns the knowledge of the inducements or sources of our actions; and the fourth the difference of natural gifts. I shall, therefore, divide this Section into four Chapters.

CHAPTER I.

ON THE IMPORTANCE OF MORALITY.

According to my ideas of the moral character of Man, his actions ought to be subordinate, or conformable to the whole of the faculties proper to mankind, and all actions which are in contradiction to the whole of these properly human faculties are bad. The point which I wish now to impress on the minds of my readers is, that human nature is so constituted by the Creator, that morality is as necessary to the prosperity of Mankind, as oxygen to combustion, caloric to vegetation, and respiration to human life, and that not the animal but the human powers are the end of human existence.

The primary virtues, essential to the existence of society, are withdrawn from our election and choice, nor are they left to be directed only by so weak a principle as reason; they are identified with human nature by the dictates of creation. Submission alone to the indispensable laws of morality is left to our choice. In doing so only can we contribute to the improvement of Mankind.

Christianity promises future rewards for every sort of righteousness, such being the will of the CREATOR. But, I maintain also, that morality is necessary in this life, not because I believe, as many do, that wicked persons are tormented by their consciences, a notion which I have endeavoured to explode in treating of the faculty and organ of Conscientiousness in the first vol. or in the physiological part of Phrenology; but because I really think, that the world is so constituted, that morality is indispensable to the general happiness of Mankind.

It is objected, that the just often perishes in his righteousness, while the wicked often thrives in his iniquity; but shall we infer from this, that morality is less necessary to prosperity than I maintain?

The condition of individuals is subordinate to that of the community. On the other hand, one power may triumph over another for a certain

time, and the animal over man in single individuals; but such a state cannot become general, nor everlasting, because the animal powers, from their tendency to the gratification of Selfishness, would, if predominant, overset society; while the powers proper to Mankind, are eminently conservative, and calculated to promote general happiness.

I grant also, that individuals and whole nations will perish, if they make use only of the faculties proper to Man. As long as Mankind remains as at present constituted, these faculties will stand in need of the assistance of the animal powers, to avoid being destroyed. Society must still be prepared for war in order to maintain peace. But history furnishes numerous examples, that wherever mere animal faculties have governed, the sovereignty did not last; morality and understanding being the two first principles of politics, and necessary to direct the actions of every faculty.

I am sorry to observe, that generally the cultivation of the understanding constitutes the principal object of education; and that in different countries, the pupils of public establishments smile with pity at praise given for good behaviour. I know very well, that children of excellent conduct do not always excel in intellect; but we find also, that many young and old individuals of great understanding do not always behave as they ought to do. These persons often convert their intellect

into scourges of society, and are the greatest enemies to the happiness of the race. Let the public beware of this in reference to authors, reviewers, pamphleteers, gazetteers, and writers of any kind. It is a too common tendency among them to say: I and my friends alone have understanding, we alone are in the right.—Let these oracles be respected if they write only with conscientiousness. Both moral and intellectual endowments are important, and therefore ought to be cultivated in harmony. By neglecting one or both, societies and even nations will come to an end.

In examining Mankind at large, we shall find that general happiness is founded more on morality than on intellect. Public establishments for relieving distress, improving morality and correcting manners, are more beneficial to society than colleges for the study of mathematics under the government of conquerors. Morality ought to be the aim, and understanding but a means of attaining it. Those, however, who know my ideas on the primitive powers of Man, and on their moral arrangement, will know that I distinguish morality from religious creeds; that my God is a God of union, who wishes to save and not to destroy; and that, in my opinion, charity, or general love, is the greatest of virtues. They will perceive that I do not agree with teachers who place the love of their country, and that of glory, above the love of Mankind; and that I

maintain the authority and the advantage of the Christian principle, which commands us to love every one as our neighbor. Jesus called *him* his brother who did the will of his Father. I allow, that we owe obligations to our parents, and to our country ; indeed I admit that there is a primitive feeling of attachment to all beings around us. But this propensity is given also to the lower animals, and is far inferior to general love. He who considers the wants of the poor, and the causes of those wants ; the deserts of the poor, the possibility and necessary means of improving their situation ; who will never encourage idleness and disorder ; who considers attachment as a quality of secondary weight ; who relieves him first that deserves it best ; and who prefers his countrymen, only in so far as they are equally meritorious is far nobler than those who are influenced by the love of their country or by a religious creed alone, to the neglect of this universal Benevolence.

It is a touchstone of superiority among the faculties that their influence is more universal. The animal feelings contribute to the preservation of individuals, of societies, and in a certain degree of the species. Human feelings alone place society above individuals, and species above societies. They coincide with the proceedings of nature. Individuals perish, while nations continue ; and these disappear while Mankind is pre-

served. The faculties which produce such effects, must be important in proportion.

When I state that the sphere of the faculties proper to Man is more extensive than that of the animal powers, this must not be confounded with the other proposition ; that a faculty is more or less generally bestowed by nature. The meaning of the latter is, that a faculty exists in a greater or smaller number of species, while the former denotes that the influence of a faculty extends over more beings. Amativeness is very general, while Christian charity is confined to Mankind ; but the effect of this latter feeling embraces all beings, while that of the former is infinitely more limited.

Thus, in all actions, Morality is to be kept in view as the aim and end. Man, by superior powers, is the lord of the terrestrial creation ; but the same feelings which constitute his superiority command him not to abuse other beings. A lower propensity excites Man to kill animals, in order to live on them ; but the superior feelings forbid us to torment them.

All sects of religion must agree that morality is necessary to the welfare of the human race, however different their opinions may be about the mode of attaining it. But I have no hesitation in declaring against any creed that undermines charity, and which teaches children that those who do

not believe as they themselves do, and that those who wish to adopt different means in order to please their MAKER, are damned. As Christianity evidently tends to unite all men in the presence of GOD, it appears to me that we are entitled to reject every interpretation of any passage of the Gospel which does not agree with general peace. The superiority of the Christian principles of morality, is proved and recommended by their good effects ; and, in this way, belief is converted into conviction.

Modified ideas about the means of pleasing GOD are natural, and present a large field for teaching tolerance and mutual forbearance. Various formalities are considered as agreeable to GOD ; but history informs us, that many of those, used by different sects, are borrowed from paganism. Every one ought to be permitted to do as he thinks right, unless the general happiness of Mankind be disturbed by it. I think that he is too proud who believes that he can add to, or exalt the happiness of his CREATOR, to whose dictates all that man can do is to submit. In submitting to his dictates, we practise the true and undefiled religion, viz. in this way we show that we are tied to GOD, and obey his will. Thus, it is an important point, in teaching religion, never to confound the *aim* with the *means*. The former is universal happiness, and loving our neighbor as one's self. The means which lead to it are various, and differen-

ces of opinion in regard to them are to be expected. It seems, however, a great error to look for happiness from Divine influence, while the natural means of producing it, appointed by the CREATOR to be observed, in the ordinary way of Providence, are neglected.

CHAPTER II.

EACH FACULTY TENDS TO ACTION.

THE faculties are innate and active in different degrees; but each desires to be satisfied, and all are necessary; hence it would be wrong to endeavor to annihilate or to neglect any one in the institutions of society; whilst the acts of every individual power may be morally good or bad, that is, conformable or contrary to the whole of the faculties proper to Man. In order to elucidate this subject, I shall make first a few general remarks, and then subjoin some details concerning the primitive powers.

In the greater number of persons, the lower faculties are the most active, and several of them more so than others. This explains the great activity of the animal nature of man. Again, single individuals, each of the sexes, the inhabitants of certain provinces, and whole nations, possess in-

dividual faculties more active than others. These primitive dispositions, then, must first be studied, and each power cultivated in harmony with the dictates of general morality, and with the particular situation of the nation, sex, or individual in question. Any feeling that is naturally too active, should never be exerted. Hence, in those children and nations, whose character is strongly marked by the love of approbation, this feeling should never be nourished by education. For, if predominant, it becomes the cause of great mischief, and it is evidently a great fault to encourage it continually, and to hold out approbation and glory as the principal reward of every action. If, among other nations, Self-esteem be the strongest feeling, it should not be encouraged. Such children are to be accustomed to attend to what others say of them, and to be spoken to freely of their faults.

On the other hand, no strong feeling can be overcome at once; its activity will appear in one way or another, and the object of the teacher or governor ought to be to make the best use of it. The love of approbation, for instance, may lead to war or peace, to idleness or industry, to vice or virtue, according to the object approved of by the directors. It is the same with every fundamental power. Has not every crime been committed, and every virtue exercised, under pretence of glorifying GOD, or of obeying GOD rather than men?

The improvement of mankind has been greatly retarded by the erroneous notion of our being born alike in feelings and understanding, and of our being capable of becoming whatever teachers please. On account of the differences in the innate faculties, on the contrary, education must be modified in many respects even for nations, as well as for individuals and sexes. As the inhabitants of cities cannot digest the food on which savages will thrive, so civilized nations stand in need of principles which cannot enter into the brains of ignorant and uncivilized persons. There are many examples in history, where nations have been ungrateful to their governors, who have endeavoured to improve their condition. Missionaries, who preach to ignorant and barbarous tribes in the same way as to enlightened people, cannot produce the desired effect. New-born children cannot bear too much light at once ; and the mind, like the eyes, must be accustomed by degrees to new impressions.

On the other hand, governments are wrong if they retard the attainment of the degree of civilization which their nations require. They are mistaken in thinking, that the special tendency of primitive faculties can be prohibited by mere commandment. As no institution, having for its object the annihilation of amativeness, acquisitiveness, the love of approbation, or any other feelings, given by the Creator, can be permanent ; as its

duration will be shortened, in proportion as such feelings are more active, in the same way, as soon as our understanding is arrived at a higher degree of cultivation, such institutions as are adapted to dark ages will no longer suffice.

The faculties proper to Man being given to govern every where, are to be cultivated incessantly, and in every one, whilst the powers common to man and animals, should be encouraged only in so far as they contribute to the great end of the satisfaction of the properly human nature, or to general happiness. The animal faculties may be employed as means, but not any one should become the aim of our existence. They may do good, when subordinate, but they produce much evil, as soon as their gratification becomes the aim of life. It is remarkable that all institutions, true Christianity excepted, are founded on selfish principles, and that by far the greater number of the motives, which they propose to mankind, originate in the animal feelings.

The regulation of the mode in which gratifications are sought, is an important point in education. Each faculty when active, wishes to be satisfied, and will excite those powers which may become the means of its gratification. Suppose, for example, that we have a desire to be distinguished, we may fight, destroy, calculate, cultivate arts, &c. according as distinction is likely to

follow the performance of such and such actions. To gain eternal happiness, we may do and we may omit various things, according as we are taught that it is to result from the one or the other. Selfishness, in general, is a great stimulus. The gratification of individual faculties may even become a means of obviating their abuses. Acquisitiveness, for instance, may be prevented from stealing and cheating, &c. by placing before the mind the consequences of illegal actions, and by showing, that the best calculated selfishness is that which is combined with honesty.

Though it is a pity, that, in common education, the satisfaction of the inferior faculties is generally represented as the aim of our existence, and of the whole of our actions; their gratifications, however, may be of great use, being a source of pleasure, and the contrary a punishment. The idle being pleased by vacancy; the dainty-mouthed by cakes and sweatmeats; the vain by decorations, fine clothes, titles, and every kind of showy appearance; the mechanician by ingeniously contrived instruments; the painter by colours. There are as many sorts of reward or punishment as natural gifts, but the gratification of those powers which are not requisite to our profession, should be only an object of reward and recreation, the difference between aim and means being constantly attended to.

A question which has been often repeated by philosophers, may be brought in here, viz. Whether it is better to have many or few wants? Want is here synonymous with Desire, or the tendency of individual faculties to seek gratification; and there are as many sorts of wants or desires as there are primitive powers.

To answer this question, we must bear in mind, that the satisfaction of each desire gives pleasure; that there are as many sorts of pleasure as there are faculties, and that desires and pleasures are proportionate to the activity of the powers; moreover, that the pains, displeasures, or states of dissatisfaction, are also as numerous as, and proportion to the activity of, the faculties. Thus, wants or active faculties may render us happy or unhappy.

In order to prepare happiness for ourselves, let us exercise those faculties which we have the power of gratifying, and check the activity of those which we cannot satisfy; taking constantly for granted, that morality is the aim of our life, and that no animal power shall be permitted to become predominant; that Ostentation, for instance, must remain subordinate to Justice, and that spending our superfluities on purposes useful to society, is preferable to employing them in the gratification of any animal propensity.

The proper employment of the faculties being so important, this knowledge is not only necessary to teachers and governors, but it should become an object of instruction for every person, and be taught and learned by heart.

We must eat and drink, because we must change the substance of our body, and we are excited to do so by hunger and thirst. But the laws of digestion and nutrition might be explained, the respective organs shown, and the necessity of submitting to the dictates of creation taught. The knowledge of the general rules of HYGEIA is useful to every one. Let then children know, that they must eat to live, but that they do not live to eat and to drink; let them feel the advantages of sobriety, and the consequences of indigestion; let them see the vice of gluttony and drunkenness in nature, and be accustomed to temperance, and to the moderate use of every sort of food. It will be easy to render them attentive to the quantity and quality of aliments necessary to be taken, and to those which do not agree with their digestive organs. It is important that they should be able to resist the desire to eat of every dish that is placed on the table. But it is a great fault of parents and teachers to preach sobriety, and themselves to give a contrary example. The example is more effectual than the precept. I think it also wrong to give dainties and liquors to children as rewards for it is in this manner that they

are taught to value them. They may enjoy the sense of taste, but they ought not to be governed by it.

In speaking of hunger and thirst, food, beverage and nutrition, a great deal of knowledge may be given to children at table, with respect to the natural history of the three kingdoms, and with respect to chemistry and physiology. Parents might direct the conversation towards convenient subjects, and enter into farther explanations after dinner. Certainly this supposes the parents themselves to be well informed, which, however, is too frequently not the case. The duty of instruction devolves particularly on the mother ; but to be able to do her duty, she must have acquired notions herself. If there be several children, the elder may assist the mother in informing the younger.

Is not the great curiosity of children a hint of Nature, that they ought to be made acquainted with many subjects ? Why then do we not rather cherish than suppress it ? We should always answer, even when questions are put to which delicacy does not allow us to reply. In such cases, we may find an excuse by observing, that they are not yet able to understand the thing. This will be believed, if we show them the reality of such an excuse in other examples. But they must never be told they ought not to know such

things. A formal denial will excite their curiosity.

The objects which concern cookery, eating and drinking, and play-things, furnish sufficient matter to different conversations. We may put questions about the origin, usefulness, and preparations of aliments. Each object will offer a large field of information. I suppose, for example's sake, that potatoes are placed on the table, the mother may ask, To what kingdom of natural history do they belong? According to the age of the children, various questions may be added. After the first notions are communicated, the mother may continue to inquire about the parts of the plant which we eat under the name Potatoes. The discussion again will require to be more or less detailed, according to the capacities of the children. Whatever cannot be shown at home, could be noticed on taking walks into the fields or elsewhere. In what country are potatoes indigenous? Geography will come in. How are they cultivated, &c. Then notions of agriculture may be communicated.

Another time, the mother may begin a conversation concerning bread. Children may learn the difference between rye, wheat, oats, &c.; the manner of grinding corn, of baking bread, &c. In this way, every article may be made an object of instruction and amusement. Children will learn

ideas and combine them; they will know every thing around them, and will feel a desire to know it. They will at the same time learn to think when they speak, and to express no ideas without reflecting on them.

Bodily exercise is another important point in education. Muscular activity is greater in childhood than in any later age. It is necessary to the development of the body and to health. To keep children quiet is acting against nature. The body, the intellectual and moral faculties, may be exercised at the same time. Playing is to be considered as a mere change of occupation, and many things may be taught by means of it; to dance, for instance, to climb, to leap, to swim, to go on horseback, to fence, &c. belong to a true plan of education. The muscles of the arms, or legs, or trunk may be exercised according to the utility of such exercise in any future situation, or according to their local weakness. All gymnastic amusements serve to these purposes. It is to be understood, that bodily exercise ought to be proportionate to the innate strength and progressive growth of the individuals and not beyond the innate capacity, since in that case the misapplication of a principle will do harm. It is said, that MILO carried on his shoulders a calf day by day, till it was full grown.

On the play-ground, children may be made acquainted with a great number of objects, their physical qualities, such as form, dimensions, weight, color, distances, phenomena of hydraulics, mechanics, and chemistry. Nothing, for instance, is more easy than to teach what is called gravity, affinity, attraction. Let children collect stones of different specific weight, let them make figures in the sand, such as circles, triangles, squares. They will learn such notions with less pleasure when they are confined to the benches. It is known, that girls, in amusing themselves with dolls, exercise many faculties necessary to their future condition in life.

The external senses deserve particular attention. Though they are not sufficient to make us acquainted with the external world, they are, nevertheless, indispensable means to acquire distinct perceptions. Blind and deaf persons show, how in the former the sense of touch, and in the latter that of sight, can be improved. For those who feel an aversion to touch innoxious insects, for instance, a lizard, a frog, a crawfish, or even velvet and other tactile objects, an early habit of doing so is advisable. It is the same with regard to a dislike to certain smells, tastes, colors or sounds. The ears ought to be exercised to bear the noise of a gun, of thunder, &c.

Children ought to be accustomed to speak loud, and to pronounce all possible sounds and articulations, even those of such foreign languages as they will be obliged to learn ; for almost every language has its particular sounds which we pronounce with difficulty, if we have not been early accustomed to them. Accordingly, nations who have the greatest number of sounds in their speech, learn the most easily to pronounce foreign languages, since they know their articulations, by having met with similar sounds in their own language. The French and English having no guttural sounds in their language, find it difficult to imitate them in the German. The Germans, on the contrary, who have not sounds of *j* and *v* of the French, or of *th* in the English, acquire them with difficulty. The inhabitants of Otaheite, when trying to pronounce the name of Cook, always said Toutou.

As to the internal powers, it is a great fault in education, to think exclusively of the intellectual faculties, and to try to conduct mankind by precepts. It never should be forgotten, that children, as well as adult persons, always act by feelings, and that charity and justice are no sciences and that knowledge is not virtue. Precepts alone have no more effect on feelings than on understanding. To say, be just, patient, and benevolent, will neither produce nor exercise justice, patience, nor benevolence, any more than we should

understand mathematics, chemistry or philosophy, if we were only exhorted to study them. Precepts must be put into execution, and this alone is of practical use. Two ideas, then, must be well understood; first, that the faculties which give feelings, and those which constitute intellect, exist independently of each other; and, secondly, that they act in different degrees of force in children as well as adults. In this sense, we may say with De la Motte, that the child is already a man, and the man still a child. It is the same idea which De la Bruyere on characters (T. II. chap. xi.) has detailed, in stating, that children, like adults, are affectionate or selfish, courageous or timid, candid or disingenuous, lazy or industrious, benevolent or envious, peaceable or quarrelsome, unsteady or persevering, humble or proud, just or unjust. The powers are, indeed, the same in children and adults; they are only applied to different objects. The same person, when a child, may be jealous or envious about sweetmeats, and when adult, about places of honor. The same faculty renders a child self-willed, a boy disobedient, and a man mutinous. Mr. Combe has well expressed the same idea; "The child," says he, "who trembles at the threat of being shut up in a dark closet; who exhibits to us with delight his new suit of clothes; who fights about a marble; or who covets his neighbour's top, is under the influence of the same faculties which, in future years, may

make him tremble under the anticipation of a fall of stocks; make him desire to be invested with a star and garter; contend for an island or a kingdom, or lead him to covet his neighbour's property." (Essays on Phrenology, p. 315.) Hence the individual tendencies must be observed, impeded, or encouraged and directed. A young girl, whom I know, was prohibited from being imperious to servants and common people; she continued to amuse herself with giving orders to such of her playthings as represented servants, and with scolding them. When she was told that she committed a fault, she excused herself by saying, that it was merely a play. But the parents were intelligent enough not to confound the feeling of self-esteem with any object of its satisfaction, and this amusement was equally interdicted.

In the cultivation of the feelings the natural language is of the greatest importance. Have the feeling which you wish to inspire, speak its natural language, and you will impress the juvenile minds. Avoid particularly the natural expressions of the inferior affections, as of anger, jealousy, envy, impatience, &c. In showing anger to children, you give a practical lesson. Follow the example of the philosopher who said: I should punish you if I were not angry.

If any inferior feeling be too energetic, it is proper to avoid every circumstance that may put

it into action. Accordingly, never vex quarrelsome or obstinate children, particularly do not at length yield to them and let them have their own way; never desire such children to do what is unjust; make every demand on them quietly, but never yield.

It is essential to know which faculties assist each other, and which act in opposition, in order to direct the actions and omissions of man. Attachment will generally rest on objects, men, animals or things, whereby the other feelings may be satisfied at the same time, or, at least, not prevented from being so. It is assisted by mildness and cautiousness. Children endowed with these feelings, and with ideality and love of approbation in a high degree, in order that they may not be deceived in their dealings with man, should be made acquainted with the difference of men, and with the various motives of their actions.

Courage is not given to indulge quarrelsomeness and anger, nor to effect gratification of vengeance. Its aim is to defend what is absolutely just. If not active enough, it ought to be encouraged, not only by words, but by exposing the individual to situations which may appear annoying. Timid children will become less fearful by being accustomed to society. If courage be too strong, its bad consequences may be shown; and, according to circumstances, attachment, selfish-

ness, the love of approbation, or the moral feelings, may be opposed as motives to restrain it.

The faculty of Firmness greatly assists the activity of every other power, but it also produces many disorders, particularly if it be naturally strong in combination with large self-esteem, and if parents, in order to form the character of their children, as they say, allow them the gratification of every fancy. Such beings are exasperated by the least resistance in future life, and become frequently unhappy. Firmness alone will never produce great actions. It only causes the active faculties to persevere. Hence the same person may persevere much in one respect, and very little in another. It has particular influence on self-esteem, the love of approbation, conscientiousness and reverence. Ideality and the want of order and time, are in opposition to perseverance.

The direction of amativeness and of the religious sentiments is of prime influence. These feelings appear commonly later, sometimes, however, earlier in life.

The longer the difference of the sexes can be concealed from children, the better. But as soon as children are inclined to abuse their persons, let them know the dreadful consequences of such a vice on the whole body, and on the manifestations of the mind. Incalculable mischief is done to in-

dividuals and to mankind at large by the abuses of amativeness. Many become insane and, in numerous cases, mind and body are ruined and all happiness undermined, by its disorderly gratifications. Parents and teachers commonly are not watchful enough in this respect. The picture may be varied, according to the knowledge of the child, and to the bad effects which are already visible in him. Every thing which excites nervous irritability, and accelerates the circulation of the blood, must be avoided. Bodily exercise, however, cannot be dispensed with, as it is necessary to produce sleep. If the functions of propagation be known, the influence of the vice, not only on him, but on generations to come, may be detailed. Many ideas of this kind are mentioned in books on physical education. I refer to them, mentioning again, that a too anxious taciturnity of parents concerning these points, will rather do harm than good, because the propensity is innate, and acts without restraint, if its destination, and the consequences of its abuses, be not clearly shown to children. Being informed of its importance, they will more readily resist, and submit to those means which seem necessary to restrain it.

The regulation of the religious feelings also deserves great attention. It is known how very different the ways of worshipping have been, from human sacrifices to adoration in spirit and in truth. It is remarkable that at all times continency has

been considered as agreeable to God. The priests of the ancient Egyptians avoided wine and wives. The Levites were forbidden to have intercourse with females during the time of their sacerdotal service. In Ceylon and Siam the priests are prohibited from marrying. The Roman Church requires an observance of a similar law.

Religious precepts of various kinds, and the most opposite opinions, when proposed as the will of God, have been listened to. The majority of mankind is credulous. Say that it is necessary to sacrifice animals, to burn perfume, to ring bells, to fast, to sing, to make prostrations, to dance, to whip the body, or to do various other things in honor of God, and man will comply. Even those who reflect for themselves, and admit the revelation of Christian principles, will differ in their explication of them. The question, then, is often put, Who can decide which is the true religion? As the tree is known by its fruit, so is the man by his actions, and a doctrine by its effects. I think that the touchstone of every principle, religious and moral, is the same, viz. its tendency to promote the glory of God and the common happiness of mankind. It is absurd, and even blasphemous, to hold out any doctrine as coming from God, the manifest tendency of which is to inflict evil. I adopt, therefore, only that explanation of every passage of Christianity which favors general love.

There are religious people who agree with respect to principles, but vary as to the particular applications of them. They insist much on some, and are indifferent about other points ; and sometimes follow the absurdities of their own imaginations ; they explain one passage of the Gospel according to its spirit, and take another literally. Others admit the principles, and say that they believe in them, but care very little for their practice ; whereas the least portion of intelligence and honesty might enable them to perceive, that the practice is better than the mere assertion of belief.

In religious education, as well as in every other sort of instruction, three things are particularly to be kept in view ; first, The objects taught must be suitable to the station of those instructed ; secondly, the knowledge communicated must be applicable ; and, thirdly, The necessary means for attaining the end must be pointed out and attended to. With respect to the first point, the choice of objects to be taught, there can be little difficulty in deciding between the advantages of communicating a knowledge of fabulous tales or examples of moral conduct ; of teaching habitual charity or vice. Children ought to be taught that moral conduct is the aim and end of their existence, and that morality is indispensable to the welfare of individuals and of society. And moralists, who wish for the improvement of mankind,

ought not to reject any means of attaining that end, except those which have been tried and found ineffectual; but these should be given up, of whatever date and authority they may be, and only those that prove useful be employed.

Thus, all powers should be directed with a view to practical life, the intellectual faculties to the acquisition of positive knowledge, and the feelings to the promotion of the general welfare.

There is another great error committed in many schools of England, viz. the third part of the year is given up to idleness. This may be necessary, because the objects to be taught are few, and because the faculties employed are fatigued, and require rest or vacation-days; but these might be filled up by the useful employment of other faculties, which could be exercised one after another. In that way more knowledge would be acquired, and sufficient time allowed for relaxation to the individual faculties.

Natural history, mechanical and chemical experiments, are well suited to the capacities of youth, and would delight many; architecture, painting, music, geography, theatrical performances, &c. would please others. No better recreation would be wished for. The great error is, that all children are obliged to learn the same things; the boys Latin and Greek, and the girls

music and drawing. Yet out of the prodigious number of girls who learn these arts, how few are there, who, after they become mistresses of their own time, and after they have the choice of their own amusements, continue to practise them for the pure pleasure they afford. Even those who take pleasure in good music, are better pleased with hearing others than in performing themselves. How often are the labors of years, and the expenditure of large sums of money, lost in this way? What a pity, that we are obliged to learn so many things for no end but to forget them!

Accomplishments in general are not sufficiently distinguished from necessary and useful instruction. The latter is often neglected, and things are taught for which children have no taste, such as drawing and music, while they never would take a pencil in their hand nor play a tune from choice. How glad are they, therefore, when the time for lessons and masters is over, when they are of age, and their education is finished. Many women, possessed of such accomplishments, never touch the heart of a man. They have learnt many things except those they ought to know. They find a partner only for their money, but the result of such a union is daily seen. Leisure time alone should be filled up by accomplishments, and whoever does not cultivate them from his own impulse, should not cultivate them at all.

Order is of great importance in our affairs. Children ought to be accustomed to take care of whatever belongs to them, and young females should be exercised in keeping the family-accounts. Order does not depend only on the understanding, but it requires also experience. This cannot be infused into the mind by precept, but must be acquired by practice. Every one should learn to employ his own powers, and to regulate his own conduct, and for that purpose he should be placed into various situations, and left to his own resources. This is particularly necessary to boys. Girls are more dependent, and, in many respects, they may be accustomed to trust to the experience of others, and to conform to the customs of society. They must be more reserved in manners and in their moral conduct, because their faults are of greater consequence than those of boys to their station in society; for repentance and tears will not wash out the errors and immoral conduct of girls. On the other hand however, prudery should be avoided with the same carefulness, and not be confounded with delicacy and modesty.

Delicacy of sentiment and refined manners are a great ornament, and ought always to be cultivated. All odd motions or attitudes, and awkward gestures, should be watched and prevented from becoming habitual.

The reflecting faculties deserve particular care. Let children be taught, if possible, to understand what they say and do, and to express their own ideas with precision. I have already mentioned, that those persons are mistaken, who think that reasoning can be improved only by one sort of study, such as of language or mathematics. The fact is, that studying any branch accurately, applying judgment to it, and reflecting on the relations of Cause and Effect which it exhibits, will cultivate the reasoning powers with equal effect. Comparison and Causality are necessary in important and in trifling things. If children have great difficulty in reasoning, the first attempt here, as in every other branch, is the most difficult part of the work. We should therefore allow them time to reflect, and wish that they should rather acquire one distinct idea, than many confused notions of different things.

The erroneous method of instruction generally pursued, is the cause why many, when at the end of their school-education, must become their own teachers. Those who have not talent or courage enough to do so, remain within the circle of mediocrity, and are mere followers in the paths of others. Yet copying, or merely imitating others, is the death of arts and sciences.

I conclude this Chapter with repeating, that each faculty tends to act ; that each faculty may be

used and abused; that all faculties ought to be employed in augmenting the common happiness; and that moral conduct and reflection are the principal means of producing it; but that precepts alone will not change and improve mankind. Their influence is little in comparison to that of social intercourse. The manners of the world, the spirit of families and of parties, customs and received opinions, are often opposite to those which we are taught at school. We hear sobriety praised, and in our families we find luxury; disinterested conduct is highly spoken of in our books, but we live in the midst of a crowd of busy creatures, whose most anxious thoughts are directed towards gain and vanity; and we observe, that respect and consideration are paid to others in proportion to their wealth, idleness, privileges, and fanciful, nay selfish distinctions. School-education is then soon forgotten. Whoever, therefore, has an influence on society, let him contribute all in his power to cause the same spirit to prevail in education, in legislation, in social intercourse, in writings, in arts, and in sciences.

CHAPTER III.

THERE IS NO ACTION WITHOUT A MOTIVE.

The principle that no action takes place without a motive, is the same as that there is no effect

without a cause and the law of causation exists in the moral as well as the physical world. Yet the nature of the motives of our actions, and their origin, are not sufficiently understood.

As long as it is believed that education can create faculties, the whole of mankind will be treated in the same manner, and the same motives will be proposed to all men. But when we know the influence of innate dispositions, we perceive the necessity of having recourse in each person to his natural powers, and of fortifying or guiding them by cultivation.

I here repeat, that our feelings, inferior and superior, furnish the principal motives of our actions, that, in consequence, the motives are different like the faculties themselves; but that the proper aim or object of our actions is only one. I take it also for granted, that the cultivation of the faculties proper to man is the aim of his existence; since they alone constitute moral rectitude, and general happiness, and submission to the laws of creation.

The superior faculties, when they act by themselves from their internal energy, do so with pleasure, and constitute the kingdom of love. But, whenever they must be excited in any way, or when the energy of the inferior faculties requires to be moderated or restrained, then government and obedience, or the rule of the law, begins. As

the inferior faculties, however, exist in human nature, and stand in need of constant regulation, it is evident, that Jesus, in His own person fulfilled the law and could not abolish it. Its existence was the will of His heavenly Father, and the constitution of human nature evidently requires it.

The motives arising from the superior faculties of man, are also termed Religious and Moral; *religious*, as far as we stand in relation to God as governor and ruler; and *moral*, in so far as it is our duty to act in such or such a manner with respect to mankind.

There can be no doubt that our Maker has bound us by laws which must be obeyed. These laws are established by the Creator, and have been confirmed by revelation. Man is a moral being, and the law of his natural morality has been confirmed by Jesus. This matter, exercising the greatest influence on the happiness of Man, is considered, with details, in my work on the Philosophical Principles of Phrenology.

Children may soon be made to comprehend that they cannot change the laws of nature, and to see the necessity of submitting to them. When they understand the tendency of these laws, they will feel respect and veneration for that Almighty Being who instituted them, and for His all-wise appointments. But it will be a matter of greater

difficulty to make every one comprehend and honestly love the general good as the aim of our existence, though it is conformable equally to the law, natural and revealed. The desire for the common welfare of mankind, is not strong enough in man, to allow us to depend on it as a sufficient motive of self-direction, and, accordingly, various means have been, and still must be employed, in order t direct our actions towards this point. A knowledge of the different motives of our actions, then, is indispensable. If the moral law be written in the heart of a man, that is, if the faculties of conscientiousness, Benevolence, and Reverence be naturally most powerful in any person, let us appeal to them. If another be more disposed to obey, because it is commanded by the revealed law, that is, if his Hope and Marvellousness be naturally the most powerful faculties, let us not reject these motives. The same aim is to be attained, but the means may vary.

If the superior motives of man;—his natural charity, his religious faith, and his reasoning powers are not sufficient to direct his actions, inferior motives must be employed, such as love of approbation, acquisitiveness, reward and punishment, fear, &c. Many persons are prevented from stealing, through the criminal code, or the fear of hell, or of being dishonored.

The kingdom of fear and selfishness is infinitely more extensive than that of love. The former has existed, exists, and will long continue to exist, but the latter cannot come, as long as selfishness and the love of approbation are presented as the aim of our conduct. While these are considered as the objects of human existence, conquerors will prevail over their satellites, like BRENNUS, who sent wine from Italy to his countrymen, saying, If you like this wine, come and help me to conquer the country where it grows.

It is essential for a teacher, or any one who directs others, to know that different motives may produce the same action in different persons. One child may behave well through attachment to his parents; another through fear, or the love of approbation; a third through selfish views, or a feeling of duty.

Moreover, it ought to be kept in view as a principle in moral and intellectual education, that children do many things by mere imitation. They often adopt the manner of thinking and acting of those with whom they live. They consider as good that which they hear praised and see done by their parents. For this reason we know by the children whether we are liked or disliked in a family. This propensity to imitate will produce most effect in children whose natural character is not very determinate, and in them it may be ap-

plied with advantage as a means of instruction. Parents therefore become the best moral teachers; but let their moral conduct agree with their precepts, if they expect to produce any effect by their teaching. If they show in words an abhorrence of vice, let not their actions be stained by impurity. When they teach their children to avoid bad company, and to esteem virtue and excellence above the distinctions of wealth and rank, let them not be encircled themselves in fashion and vanity. If they exhort them to order, truth, candor, and charity, let them prove their sincerity by their own actions.

Many children, at an early age, are capable of feeling arguments, but several cannot. Parents and teachers should be always just and reasonable in what they require of them, and then never yield to any resistance or remonstrance whatever on the part of the child. A habit of submission is of the utmost consequence to the moral improvement of children.

Children, however, as well as adults, like what is conformable to their natural dispositions. If their intellectual powers are very active, they may be allowed to follow their dictates, and to determine even their own future situation in life. But, if parents wish to bring them up to professions which they themselves prefer, and not according to the natural gifts of the children, or if children

are not distinguished by their talents, they must be encouraged, by various means, and sometimes even forced, to exertion, and to make a choice of employment. Without this, many children would become careless and idle. It becomes necessary to impose tasks whenever the natural dispositions do not induce children to attain the knowledge requisite for their profession. It is always an error to allow idleness and free hours as a reward, because such a proceeding implies that learning is a punishment. It is not very judicious, neither, to conduct education, so that kings' birth-days and holydays are liked, because they exempt children from attending school. This is nearly as bad in principle, as compelling them to learn verses or write versions by way of punishment. Certainly a better mode of chastisement, if necessary, might be found. This kind of punishment is similar to that inflicted by some priests who as a penance command a repetition of certain prayers.

The question concerning emulation and its useful or dangerous influence is discussed among institutors. Some prove its good, others blame its bad consequences. It is founded on a strong fundamental feeling on the love of distinction or approbativeness which may be used or abused. Those who have certain powers very strong are pleased with their gratification, they do not want any other motive. But emulation may become an excitement, of any feeling as well as intellectual

power. It is a great stimulus for children to learn their lessons, but as its influence is so great in society and the cause of numberless disorders, and as it is so much cultivated in social relations, I find it advisable to omit it entirely in school education. At all events no praise should be bestowed except on talent and virtue. It certainly should be better if we could think that in doing all that which is to be done we do merely our duty.

Selfishness and approbativeness act with the most different appearances according to their combinations with other faculties and to external circumstances. It is known, and I have already mentioned that their activity has been considered, by some philosophers as sufficient to explain all the actions of men, and even as the source of superior talents. Indeed, whenever we omit any thing, in order to gain any earthly or heavenly enjoyment, selfishness is active ; and whenever we wish to be approved of, the love of approbation comes into play. The tendencies of these two powers are easily distinguished in children ; but I repeat, that their preponderance produces great mischief in society ; that they are too much cultivated in common education, and that it is an error, the evil consequences of which are incalculable, to represent them as the chief aim of our existence, while they ought to be only secondary motives. I have seen children endowed with a great deal of pride

and love of approbation, who became quite intoxicated by being praised, and, certainly from this excitement, committed new faults, and sometimes became intolerable for several days.

Let us examine with some more details whether selfishness and the love of approbation produce talents ; and whether the satisfaction of these two feelings should be the aim of all our actions ? Is it true, that arts and sciences originate and improve in proportion as they are patronized by pecuniary rewards and honor ? In Greece, the masterpieces of poetry, eloquence, history, and philosophy, were not the result of patronage. The successors of ALEXANDER the Great encouraged the learned, yet sciences lost their grandeur and originality. Only commentaries, compilations, and imitations became numerous. In reading history, we meet with many great men who found their reward in the cultivation of the sciences and the arts themselves, and who were even persecuted on their account. Many others have persevered in contributing to the improvement of arts and sciences, only until they met with rewards and honors ; and it was fortunate if this did not happen too soon, as it appeared they worked only for them, and became idle when their aim was attained.

If individuals, because they possess some talents, are to receive the privilege of deciding on the

value of every scientific production, their elevation to distinction becomes a great obstacle to the progress of arts and sciences, because the learned themselves are not free from selfish passions, and, like the vulgar, are ready to hinder others from attaining similar enjoyments and honors. Few are disposed to acknowledge the superiority of others.

As the great maxim of a liberal government is, *Let them act*, so the true patronage consists in not preventing talents from exercising themselves, as long as absolute justice towards mankind is not injured; in rewarding productions according to their influence on the general welfare, and in rewarding only services actually performed. Among the abuses concerning rewards and distinctions, I mention only the fault to give to regular professors the exclusive right of teaching, and what is still worse, to permit them to delegate their duties to any substitute they may choose. Monopoly impedes improvement in every thing. If the services of a professor be useful to society in other avocations, and he cannot attend to his scientific pursuits, his professorship ought to be transferred to the person who, next to him, cultivates that branch with pleasure and success.

It is certain that reward and distinction do not *produce* talents, though they are of great weight in exciting and directing the actions of all the

faculties. I even infer from history, that mankind will suffer, and that all institutions will remain imperfect, as long as selfishness and glory are the aim of our actions; or, in other words, as long as places are looked for with a zeal in proportion to the profit they bring, and to the distinction they bestow on the possessor, whilst all our actions ought to tend to the common benefit and honor of mankind. Nothing but the place we occupy in society, and fitness for its duties, should give distinction. It should be considered as every man's duty, to do all that he is capable of doing for the general happiness of those among whom he lives. Private interest, when exclusively pursued, is the greatest enemy of morality. Whoever contends for it as the chief aim of our existence, acts after the impulse of his animal nature;—he is not a man.

Selfishness, it is true, has greatly contributed to abolish various kinds of injustice, for every one is ready to resist his oppressor. In religious and civil legislation, privileges are more and more limited, and the rights of man become more equal than they were in ancient times. We no longer believe that all mankind is made for the sake of a few. Indeed, as long as there is any thing to gain, there will be many who will contend for independence, out of mere selfishness; but the principle from which they act, though hitherto auxiliary to the common good, cannot be applauded; for it

would lead them to tyrannize in their turn, if they had the power.

Mankind cannot become happy, if selfishness be not replaced, or at least mitigated, by a superior motive of action. He who pursues his own advantage only, so far as he can do so without injuring another, is just; he who gives up his superfluity rather than to do harm to another, is noble; he who works only for the common welfare is the most noble, and no one, but him, deserves that name.

A great step towards perfection, would be the full and practical admission of the principle that every one has the right to employ his talents to the utmost for his own benefit, as far as he can do it without injuring others. This system of government is certainly far superior to that of exclusive privileges of any kind :—Many battles, however, will be fought betwixt selfishness and bigotry on the one hand, and reason and sound morality on the other, before it is generally admitted and followed.

It must be added, however, that the adoption even of this principle cannot be expected to obviate misery, nor luxury, with all its fatal consequences, for this simple reason, that the natural endowments of individuals are very different, and that those who have more talents will govern the others

in one way or another. While selfishness continues to be the motive of their actions, the highly gifted will employ the weak to advance their own ends. The poor will be constantly dependent on the rich, and will serve them as the only thing they can do to live. Supremacy will, of necessity, fall on single individuals. Nations also, through selfishness, interfere with each other, and war becomes unavoidable. The fortunate commander finds satellites whose advantage it is to serve him, as workmen serve the manufacturer; he avails himself of their talents, and tells his countrymen that peace, and obedience to his will, are essential to their happiness. Is not this the state of Man as far as history informs us? And this must continue to be his state, wherever personal welfare is the only rule of conduct. Tyranny causes revolutions; revolutions, again, are productive of tyranny; and all this has its origin in selfishness. There is no possibility of changing this permanent circle of events in mankind, except by subordinating private interest to common advantage.

This doctrine is not new, it is the basis of Christianity; but it has been dreadfully abused at different times, even by pretended teachers of morality. It is no where practised in its full vigor, and happy is the nation whose governors follow it even in a limited degree. But it ought at least to be generally propagated and its good effects shown to every one who is capable of appreciating them

The difference of motives does not only exist in children, but also in adults and whoever wishes to determine different individuals to the same conduct must appeal to different faculties of the mind. He must follow the example of the great apostle who became all things to all men, in order to save them. Whoever has only one motive of salvation to propose, will never keep all mankind together, and whoever wishes to move strongly must appeal to the feelings. Experience however shows that few persons can be guided by the superior feelings alone, and that reasoning is seldom of any great weight as a motive of conduct ; it is also obvious, on the other hand, that the greater number of persons are actuated by inferior motives, and even by commandment and by fear. Yet I would recommend, that the propriety of making use of all possible inducements to produce virtuous conduct should be kept constantly in view, and that every motive should be employed, beginning with the most noble and elevated with morality and reason, and ending with the lowest, with fear and impressions on the sense of feeling, and the sensations of hunger and thirst. We may reason with those who understand the laws of the Creator, and feel their importance, whilst others, who cannot comprehend these laws or perceive their utility, should be restrained by inferior and selfish motives, even by disagreeable impressions on their senses, or by feeling the pains of hunger, or solitary confinement. The latter means will be rarely necessary,

but if so, should not be neglected. The flogging system however, will be abandoned in proportion as human nature becomes understood, and education conducted according y.

CHAPTER IV.

EVERY ONE HAS HIS NATURAL GIFTS.

The reader, somewhat versed in Phrenology, will easily perceive, that the different considerations of this work are in the most intimate connection with, and even founded on, ideas developed in other publications to which I have frequently referred. In this Chapter I take it for granted, that all mental dispositions or powers, are innate, and I speak of them in so far only as regards the direction of their actions.

In respect to feelings as well as intellect, mankind may be ranged in different classes. There are persons who may be called fortunate, if not elect, namely, those who, from the felicity of their natural constitution, desire only what is good, who act from love, and show pure morality in all their actions. In these happy beings, the superior feelings predominate much over those common to man and animals.

The rest of mankind, by far the greater number, are obliged to combat against the activity of the inferior feelings, and stand in need of the law to direct and restrain them. Three subdivisions of this latter class may be considered. The first embraces those who have one or several of the inferior as well as one or several of the superior feelings very active. These persons may be great in vice or virtue, according as they follow the dictates of their inferior or superior faculties.

In the second order, may be reckoned those in whom certain inferior faculties are very active, and all the superior very weak. Such individuals are exposed to the danger of being overwhelmed by vice, in proportion to the weakness of the superior motives. This disproportion is common in great criminals.

In the third class are placed by far the greater number of mankind, namely, those individuals in whom all the faculties are middling; those who act according to education and external circumstances, and follow, without examination, the moral and religious principles which they are taught. Some philosophers, founding on them as instances, have been led to maintain, that man does every thing by imitation. Though that opinion be erroneous, the influence of imitation, remains very great, and we may say with Mr. Combe, (Essays on Phrenology, p. 322.) "As a

general rule, whatever you wish your child to be or do, be that or do that to him. If you wish him to be outrageous, to be cruel, to be quarrelsome, be outrageous, cruel, and quarrelsome to him. If you wish him to be humane and polite, be humane and polite to him. If you wish him to be just and pious, be just and devout before him." The great mass of mankind, indeed, cannot be left to their own guidance; common people, when tempted, easily yield; education, therefore, in all its details, legislation, and all public institutions, ought to contribute to accustom them to regularity and order. But, at the same time, the rulers of mankind must not expect the lower minds to be obedient whilst they forget their own duty. Power is given, not for the selfish gratification of those who are invested with authority, but to promote the general happiness of the community.

With respect to understanding, it is also certhat few are endowed with a mind so comprehensive, as to enable them to learn whatever they please, and to embrace the principles of universal knowledge. Some are given rather to deep reflection than to great learning; others have less reflection, but much talent for acquiring erudition; and, in the last place, the greater number do not excel in any department of knowledge, of art, or of science whatever; but may learn any

thing that is necessary to qualify them to become useful members of society.

The preceding facts being ascertained by observation, we may examine the question, Whether the same kind of education will equally suit every individual.

The aim in educating all must be the same, namely, to render them virtuous and intelligent; but as the natural endowment of individuals is different, all persons are not capable of the same improvement, and every one cannot be induced by the same motives to pursue the same end.

The faculties proper to man, being the aim of all our actions, should be cultivated in every person as much as possible, but the natural difference will be observed with respect to the energy of these, as well as of the other faculties in different individuals. Nature, by her endowment, constitutes some characters moral, and others religious. The latter will act more from faith, the former from duty. Yet, the law, "Love thy neighbor as thyself," must be constantly held up to both, as the object of their exertions, and obedience to it required, even of those who do not feel inclined to do so.

If the superior motives be not sufficiently strong to produce this obedience, the lower faculties

must be employed. The influence of the latter powers, then, is double; they constitute motives themselves, and they also assist the superior feelings to arrive at their gratification. Among the lower motives, selfishness and fear are the most generally energetic, and no legislation can exclude the use of them.

Thus, a true system of education cannot be founded on single views, or established according to single individuals; it must be adapted to human nature. I have already mentioned that whoever will direct man, ought not to hold out only one motive of action. He who endeavors to change every person into a philosopher, and he who will never reason with any one is equally mistaken. A preacher who invites others to become morally good, will err when he trusts entirely to the motives which govern his own actions, not being aware that sometimes such motives make no impression on others. He ought to bring forward all possible reasons to touch all his auditors, and make them feel those motives which they are susceptible of. He ought to be particularly careful to be understood, and to speak by examples. Moreover, his precepts must be confirmed by his own actions. He who teaches order and cleanliness, must be orderly and cleanly himself; he who preaches peace and charity, must not deny these principles by his moral conduct. Those who say, Follow my words, but not my actions, are

unfit for their situation, and ought to be replaced by more worthy subjects.

It follows, that the feelings, as well as and even still more than the intellectual faculties, ought to be considered before children are destined to certain professions, or adults to certain places. To bring up a child endowed with great animal propensities, such as Amativeness, Combativeness, Acquisitiveness, Self-esteem, &c. to the church, whatever his intellect may be, is the height of error and absurdity. Nothing has done greater harm to society, than placing individuals in professions and situations for which they were unfit, not only through the want of some necessary faculties, but also through the inordinate activity of some of the opposite ones. Strong amativeness or cruelty produces mischief in a Roman Catholic priest, as does the love of domination in the representative of a free nation, corruptibility in a judge, fear in a general, &c. The feelings, also, ought to be exercised with a view to the future destination of children. Combativeness is to the soldier what reverence is to the clergyman ; but, in both, benevolence and conscientiousness should be active.

It is also impossible to insist too much on the importance of considering the effect of the natural feelings, in the choice of persons to rule or to lead society. This highly interesting point can be perceived, in all its magnitude, by those only who

are convinced, that the faculties which produce feelings, are natural gifts differing in every individual; that they are independent of intellect, and are the principal cause of our actions. In this way, fishermen, who are eminently gifted in natural sentiments, may be better moralists than high priests, mathematicians, orators, or philosophers, who excel only in intellect, and whose moral sentiments are weak compared with their inferior propensities.

An opposite error, but not less hurtful to society than the preceding, is committed by those who despise and neglect the cultivation of the intellectual faculties. Some religious persons of this kind, have endeavoured to put aside all temporal concerns, and have become hermits. Others avoid all pleasure, or even torture their body, in order to be agreeable to their CREATOR. Others represent a knowledge of the Bible, as a substitute for all other information, in the same way as the Mahometan confines his knowledge to the Koran. Our ignorance of human nature is the cause of such mistakes. The faculties which produce feelings, constitute only one part of our nature; the other part is intellectual, and the feelings work in darkness if not enlightened by the understanding.

Intellectual education too, is frequently misconducted from ignorance of human nature. The basis, however, of the direction of intellect is the

same as that of feelings. A plurality of intellectual powers exists, and they are possessed in different degrees of strength by different individuals. The reflective faculties are essential to our moral conduct in every situation; and are necessary to form clear conceptions in all intellectual operations, while the perceptive faculties are applicable only to certain kinds of employment. The reflective powers then should be exercised in every individual.

I have already repeated, that all our learning ought to be useful, and that we should obtain positive notions instead of mere signs, which convey no meaning. Indeed no one has excelled, nor will excel, as a deep thinker, as a great minister, general, lawyer, physician, or moralist, merely because he is a good classical scholar. Great men are no doubt frequently skilled in the classics; and it would certainly be astonishing, if their natural capacities, which enabled them to become great, should prevent them from becoming good Latin scholars, since we see that they are obliged to spend more time and labor in learning Latin than in any other pursuit. But it should never be forgotten, that the talent for learning artificial signs is a primitive one, and that it may or may not be combined in any individual with a great endowment of other intellectual powers, and hence that it is wrong to consider it as the standard of understanding in general. It is high time, says

Dr. Rush, (Essays Literary, Moral, and Philosophical. *Phil.* 1806,) to distinguish between a philosopher and a scholar, between things and words. We may be good scholars, and know nothing of man and things. A mere scholar can call a horse or a cow by different names, but he frequently knows nothing of the qualities and uses of these valuable animals. "A boy of eight years old, with the Latin grammar in his hand, asked his father who made the Latin language, and for what it was made? Another boy, of eleven years of age, wished he had not been born, because of the trouble which he found in learning Latin." It is certain, as Dr. Rush also says, that many sprightly boys, of excellent capacities for useful knowledge, have been so disgusted with the dead languages, as to retreat from the drudgery of schools to low company, whereby they have become bad members of society.

The exclusive study of the ancient languages has retarded the progress of the arts and sciences. Whoever takes an interest in their improvement must declare against it. Philology ought to be considered as a particular branch of instruction, in the same way as Chemistry, Botany, &c. Useful and practical knowledge ought to be the principal object of intellectual education. During the time we spend in learning the words in which Virgil delivers the erroneous opinion, that bees originate from putrefaction, we might learn, with greater

advantage, the natural history, treatment, and usefulness of this insect itself. In countries where vines are planted, it is more useful to teach children how to cultivate them, and how to make wine, than the expression which Horace empl oys to inform us, that he liked a good glass of wine. Instead of learning Mythology in Latin and Greek, we had better make ourselves acquainted with the history of the different religious creeds, and of true Christianity by reading in our mother-tongue. Of what use is it to us to know what words the Greeks used when they spoke, since we never converse in Greek ?

Intellectual education may be divided into General and Professional ; and in both respects the pupils may be subdivided into several classes, not according to age and time, but according to the objects to be taught, and those to be learnt ; for, in point of fact, some children learn double what others do in a given time, and succeed better in one branch than in another. They should remain in each class as long as, and no longer than, is necessary to acquire sufficient knowledge of the branch there taught. There should be one professor for each branch, and each class should be conducted according to the plan of mutual instruction.

I have already laid it down as a fundamental rule, that no sign should be employed without its

meaning is explained, and that children should be constantly admonished, that they use artificial signs as means of communication or recollection, and that sensations, feelings, notions and reflections, precede, and can be acquired only by, the activity of the faculties themselves.

I reckon the knowledge of as many objects and beings as possible, viz. of the three kingdoms of natural history, of their physical and chemical qualities, of the vital phenomena, of history, geography, geology, and cosmography, of anthropology, the mother tongue, printed and written signs, calculation, and, finally, moral and religious principles, to be essential to a general intellectual education.

Elementary ideas, or outlines of these objects, are sufficient for children ; but during the college education, these branches are to be extended and detailed, but always taught by the way of mutual instruction.

It is a common complaint that arts and sciences do not improve as much as might be wished for. This proves at least that education does not produce talents ; but I think, on the other hand, that Nature has given many capacities which education suppresses. If, for instance, a boy who has little talent for learning Latin, but great inclination to draw, will, whenever the master turns his eyes

away, exercise his natural bias, he will, when perceived, at least be scolded. The consequence will be, that at the end he will know but very little Latin, while his innate talent of drawing has been prevented from being exercised. In this way many children are punished for cultivating their natural gifts, and their intellectual education is impeded. How different would every one be, were he brought up according to his natural endowments. It is really the greatest misfortune for mankind to educate children and youth in an indiscriminate manner ; and we may say, that in consequence of absurd views in the selection of the objects taught, and in the manner of teaching, learning has hitherto been tiresome, unprofitable, and even disgusting in no ordinary degree.

The mistakes committed are particularly great in professional education. It is a lamentable truth, that few persons stand in the situations for which nature particularly fitted them. This soldier ought to have been a clergyman ; that clergyman a soldier ; and here we see a shoemaker who was intended for a poet ; and there an advocate who was designed for a shoemaker. The first indication of improvement in this respect will appear, when human nature shall be better understood ; it will be known that there are natural gifts, that these gifts are different ; that precepts and rules neither bring forth talents nor moral conduct ; that none should be promoted to the degree of a lead-

ing man, who is not fit for the station, and that he who is fit for one place is not on that account necessarily fit for all others. It is a great evil if education be very expensive, so that merely rich persons can receive it. Their children are not always the most talented, whilst the geniuses among the poorer classes are excluded. In this respect the Roman hierarchy serves as a model. It was conceived in a true republican spirit, and no civil government has hitherto shown a succession of talents at the head of affairs, to be compared with the church of Rome.

There is another example on record, which proves the importance of choosing the talents among all classes and employing every one according to his talents. The society of the Jesuits rose in a short time to an extraordinary height and influence. Several causes contributed to this result ; but the principal one certainly was, that they were employed in conducting education, distinguished the genius of their pupils, chose for their order only those who excelled in talents, and employed each individual according to his natural dispositions. No society will acquire an equal influence that expects to do so from teaching alone.

Moreover, their regulations were calculated to contribute to their excellence. They were under a leading general, who nominated without control all functionaries of the order, and could re-

move them at pleasure. To him the reports of the subordinate societies were submitted. These reports were minute and circumstantial in the highest degree, containing exact information of the characters of the novices, and professed members, their talents, dispositions, and prevailing tendencies, and, above all, their knowledge of human nature, and experience in affairs. Thus, the general could appoint to each man his station and his reward, could elevate and degrade, exclude and retain, and allot the chief duties to the highest abilities.

I am far from defending the church of Rome and the society of Jesuits in all their tendencies. I argue only in favor of their sagacity, in furnishing means of education to the better heads of all classes and in employing every member according to his abilities.

If every one were employed according to his natural gifts, a double advantage would result: arts and sciences would be cultivated with more success, and many persons would be better pleased with their station in life. It is certain, that it is not always the profession to which we are forced by circumstances, that makes us happy. Many would be satisfied with a smaller income, if they were allowed to follow their natural bias. Even people of independent fortune are still dependent on the general arrangement of education.

They know perfectly well that one or another of their sons will never excel as classical scholars, but they must submit to custom, and prejudice: the boys must be drilled for years, though they will soon forget that which they learned by compulsion. This is school-wisdom!

The second error of professional education is, that we are plagued with a great deal of useless knowledge, while the most important objects are overlooked. Of what use is mathematics to a clergyman, while his attention is scarcely called to human nature, and to the organic conditions on which the manifestations of the mind depend? None of the unprofitable studies ought to be compulsory. Yet as every kind of knowledge is useful, no branch of it should be neglected, and therefore Latin and Greek might with propriety, continue to be taught, if we make it requisite for those only to learn them who have the inclination to do so, or whose professions require such knowledge. No one can learn every thing, and it is wrong to oblige pupils to learn that which is useless in their practical situation in life.

The third error of professional as well as of general education, consists in the method of teaching. It has been examined in the preceding pages, and I mention it once more for the sake of connection. Children learn languages without ideas,

and natural history by mere descriptions; and those who teach them in this manner, if they think at all about the matter, must proceed on the belief that every word communicated necessarily excites, in the mind of the pupil, the idea which they mean it to convey. This, however, is an extravagant error; for words can excite only ideas already acquired, and if no previous ideas have been formed, they are mere unmeaning sounds. The same error is committed in professional education. In the study of medicine, for instance, we are frequently told a great deal about various diseases; of external appearances; of different conditions of the pulse or skin, &c. before we observe such things in nature. The result is, that the time and labor we spend in acquiring such theoretical knowledge are, in a great measure, lost. Let us first see Nature, and then hear descriptions. A medical student, who has never seen a patient, but studied the theory of diseases, will be as little acquainted with them as with minerals of which he has only read the descriptions, though he might excel in his theoretical examinations.

Thus, in the study of medicine, it is not only wrong to compel the students, as is the case at certain universities, to learn the auxiliary sciences in detail, such as mineralogy, botany, zoology and chemistry, since a perfect and practical knowledge of each of these branches would require several years; but it is also a great error to begin with theoretical lectures.

Moreover, the individual branches of medical education are too much separated. The instruction begins commonly with anatomy, without the pupil being taught to think of the use of any particular part. At certain universities, they spend the greater part of the time in studying osteology and myology, (the knowledge of the bones and muscles ;) they must learn the name of each bony ridge and edge ; but may hurry over, with very superficial notions of the viscera and nerves, which certainly are more important to medical practitioners in general than those of the bones ; whilst operative surgeons alone stand in need of a very exact knowledge of the bones and blood-vessels.

Physiology and anatomy ought never to be separated from each other : the structure will be learned with more ease and pleasure when at the same time its uses are taught. On the other hand, students ought to begin with the more necessary functions, and go on to those of less importance. When well acquainted with anatomy and physiology, they ought to see patients, and the different morbid symptoms ; they should learn to distinguish diseases, to become attentive to modifications according to age, temperament, climate, season, and manner of living, and to learn the mode of treatment. Being instructed in this practical way, they will feel an interest in studying the *Materia Medica*, or the substances used out of the three kingdoms of nature, and also the chem-

ical preparations and doses. This study will not require great extension, if we attend more to the art of healing than to the display of knowledge. The most skillful practitioners use a small number of drugs in curing their patients, and they use still less for themselves, being indisposed.

When human nature shall be better understood, and the primitive faculties of the mind, and the conditions of their manifestations more perfectly known, professional education will be better regulated, and we shall then no longer be obliged to learn merely for the school, or, as we commonly say, for the examinations. We shall then acquire only practical knowledge, and no one will find it necessary to begin his own plan of useful learning when he has finished his studies at the university. Indeed, nothing can be more tedious for students, than to attend *ex officio* lectures of mere theoretical schoolmen.

Here the qualifications of teachers might be considered with propriety; they are certainly of great importance, but it is not my intention to speak of them. Pupils are well aware, that great abuses are committed in this respect; that it is not always the most worthy who fills the chair. I merely notice, that there is a difference between the possessing of knowledge and the capacity of communicating it to others, and that some persons of more knowledge are sometimes less skilful in

teaching, than others of less information, in the same way as the best students of theoretical knowledge have not always the most practical skill.

The common method of teaching arts is not better than that of cultivating sciences. Let us suppose, for the sake of example, that those only who have natural talents apply themselves to drawing, painting, and the arts of imitation,—but we may ask, how are they generally taught? They are too frequently confined to copying the antiques as the only models of beauty and perfection, instead of representing and imitating nature. In this way artists will be only copyists, and never can acquire any claim to originality. On the other hand, the ancients had no exclusive privilege of genius, nor did they necessarily exhaust all the sources of excellence, so as to leave to posterity no resource but to copy them. On the contrary, there are many antiques that have no merit but their age. The only criterion, then, of greater or less perfection in works of art, is their resemblance to nature. Now, if the ancients have brought forth masterpieces in imitating nature, why should not modern artists do the same, since nature, though infinite in her modifications, is constant in her laws? Let us imitate the method of the ancient artists, but not copy their productions. They represented nature, and imitated her varieties; they gave to each strong hero, strong muscles, yet different in proportion and size, just as we find in nature;

why should our artists copy only the statue of HERCULES, in order to indicate bodily strength? Why should they in general confine themselves only to one and the same configuration and attitude for particular personages? All musicians might be equally, and, with the same right, requested to follow only the productions of one or several great composers; and all music which is not like that of HANDEL, MOZART or HAYDN, be declared to be good for nothing.

Even on the supposition that education, in all its details, is well understood, and its principles practised, still there will be but a few individuals, who will unite all the faculties necessary to such or such a situation. The individual painters will be rare, who possess in a high degree the faculties of Constructiveness, Configuration, Size, Coloring, Imitation, Individuality, Comparison, and Causality. The same difficulty of uniting the necessary fundamental faculties together prevails in all arts, sciences and professions. In every one there are and will be individuals endowed with one or several of the necessary gifts; but it seldom happens that all the faculties are united in an eminent degree in one person. The combinations of the primitive powers are innumerable, and form the proper subject of a particular treatise on talents and characters.

The reader will keep in mind, that in this volume, I intend merely to expose the fundamental principles according to which education is to be regulated, and the human race perfected. The peculiar applications are without end. The two following chapters, however, one on the education of both sexes, and the other on that of nations, seem to me particularly interesting. Yet there too the general principles remain the same, but their application is to be modified, and adapted to the peculiarities of sexes and nations.

CHAPTER V.

EDUCATION OF THE SEXES.

The question, whether both sexes are to be educated differently, or in the same manner, and placed in different or in the same situations in practical life, has been, and is still differently answered. Women call men usurpers and tyrants; and they, on the contrary, boast of natural and positive rights of superiority. I shall consider, in the first place, in a general way, the condition of women as it was, and as it is, and then examine what natural claims they have to equality. Their education is to be regulated according to the determination of the latter point.

The condition of women is very miserable among barbarous nations; they are slaves. Wherever bodily strength and animal feelings predominate, they are sadly off. They are purchased, and divorce is permitted. The Jews were privileged to divorce their wives. (Deut. xxiv.)

Among civilized nations, as long as the code of morality is dictated by the lower feelings, females are looked on as means of gratifying the selfish passions of men. The ancient Greeks and the European nations, during the dark ages, treated them with every indignity. Polygamy is intimately connected with the custom of purchasing wives. It prevailed originally every where, and exists still in many countries. In China, the wives are sold at marriages, and not permitted to make any choice of their own. By polygamy, however, some men usurp the right of others, a custom which is contrary to nature, since more boys are born than girls; or are we authorized to admit that the contrary happens in Asia? The pure spirit of Christianity abolished this odious practice, and re-established the primitive law of the CREATOR.

The female sex has risen by a slow progress to higher and higher degrees of estimation in Europe. Females are respected wherever moral feelings are esteemed. Where this is the case, they are valued as friends; but still they are either con-

sidered as weak and delicate creatures, and assisted, since it is thought a duty to compassionate and to succor the feeble, or they are treated as simple and useful housewives.

Where a taste for beautiful forms and elegance of manners prevails, the females are considered as agreeable companions, and often become mistresses.

Women are best treated, when polite manners and moral feelings are cultivated. Then they live with men under the decent form of matrimony. Their gentle and insinuating manners are highly appreciated, and they are considered as intimate and faithful friends.

Yet there is no society where the two sexes stand altogether in an equal situation. Is this difference founded on nature, or the result of the selfishness of men? Women speak of vindicating their natural rights; they call it tyranny to deny them a share in civil and political affairs, to force them to remain immured in their families, &c. Mary Wolstoncroft has taken great pains to show, that both sexes are by nature equal. She was obliged to admit the actual inferiority of her sex; but still she endeavored to prove, that women are degraded only by want of education, and by external circumstances; and that men, through jealousy, purposely neglect the cultivation

of girls. Male writers, on the contrary, maintain, that nature has made the two sexes different, though concordant, so as to produce together a delicious harmony; that she has prepared them for their future destinations, by a particular modification of feelings and intellectual faculties given to each, and avoided rivalship between them, by giving them different dispositions.

It is to be understood, that I do not speak of single individuals. There are women who resemble men, and *vice versa*. MARY WOLSTONCROFT speaks of her own manner of feeling and thinking, which resembled that of a man. She contends particularly for the power of generalizing ideas, of drawing comprehensive conclusions from individual observations, a power which seems to her the only requisite of an immortal being; a power which is commonly denied to women, and often considered as inconsistent with the female character. I allow that this power exists in some women stronger than in many men; but MARY WOLSTONCROFT would accuse herself, and speak against her sex, if she would draw general inferences from her own individual feelings. As I am of the decided opinion, that the two sexes, in the actual state of things, are naturally different in their dispositions, I shall contrast them in a summary view. They possess essentially the same powers of mind, the whole difference consists in the degrees in which they have them.

The form of the female body is rounded, and indicates rather delicacy and beauty than strength and solidity. "Let us be allowed," says Mary Wolstoncroft, "to take the same exercise as boys, not only during infancy, but also during youth, and we shall arrive at the same perfection of body." I admit, that in girls, confined to close rooms, and prohibited from taking sufficient exercise, the muscles are relaxed, and the digestive powers destroyed. It would certainly be advisable to take the greatest care of the bodily constitution, and to adopt a manner of living which would secure females against bodily deformities and the immense train of nervous complaints that afflict them under the present system. I pity the female sex for their physical education being so utterly neglected, and for their mental improvement being thoroughly mismanaged; yet I am also fully convinced, that although the same physical education were given to the muscular system of both sexes, each would preserve its peculiarities, because the functions, those at least which characterize the sex, are different in each. Country people of Europe furnish a certain proof of the truth of this assertion, boys and girls are brought up in the same way, but it is superfluous to say which sex is the strongest, and which has recourse to the other when muscular strength is required. Women are exposed to many little disorders unknown to the male sex. Farther in fulfilling their duty as mothers, they are exposed to

great sufferings, and causes of weakness. Mankind is treated in this, as in many other respects, like all viviparous animals. Though the manner of living be the same in both sexes, the females are smaller and weaker than the males.

Some of the feelings necessary to the preservation of the species are stronger in men, and others of them stronger in women. In animals, the male pursues, the female yields, and so it is in mankind. Among all nations men court, and women are courted. As to the love of offspring, the two sexes show a decided difference. Female children delight to dress and undress a baby, to take every possible care of a doll, to get an infant in their arms, to carry it, to sing and to walk about, staggering under the weight. Boys seldom think of such a pastime. They have more inclination to noisy amusements, to run about, to ride upon a stick by way of a horse; they delight in a top, a ball, a drum, &c. Since the suckling mother must stay with the child, and provide for its wants, nature has taken care that she should be pleased with doing so. Indeed many mothers have this feeling too strong, they cannot manage their children properly; they spoil them, become unjust towards other persons on their account, and sacrifice truth and every thing for their sake. This is seldom the case with fathers; they are commonly obliged to inflict the deserved punishments, and to be the judges in all disputes.

Mary Wolstoncroft denies that women from birth, independently of education, have a fondness for dolls. She quotes her own feelings, and ventures to affirm, that the doll will never excite the attention of a girl, unless confinement allows her no alternative. "Girls and boys," says she "would play harmlessly together, if the distinction of sex were not inculcated long before nature makes any difference." Mary Wolstoncroft is very wrong to take herself as the standard of her sex, while general observations show, that throughout nature the love of offspring is stronger in females than in males.

Another feeling more energetic in women than in men, is Attachment. This feeling is not the result of their weak state, but is given by nature. Many women have sacrificed to it their happiness and welfare. Females commonly wish to possess, exclusively, the friendship of others, and often complain of the want of friendship in men, since they are not so exclusively governed by it. The circumstance of this feeling being so energetic and prevailing in women, is an additional motive why seduction should be more severely punished. I fear that many legislators wink at this crime, from the circumstance of their not being themselves so prone to strong attachments as women.

There are still some other feelings more active in women than in men, which essentially enter

into the formation of the female character. It is, however, difficult to say whether they contribute to their happiness, since it often happens, that, if they be not satisfied, they become sources of unhappiness to them. I allude to Ideality and Approbativeness.

One of the most prevailing sentiments of females is the Love of Approbation. They show it from their earliest infancy in dressing, walking, speaking, &c. &c. They are constantly desirous of knowing what others say of them; they are fond of distinctions of every kind, of decorations and external show. Young girls, who are scarcely capable of understanding what is said of them, may be governed by talking to them of what other people think of their behaviour. This motive has not the same effect with boys. Many females are intoxicated by the love of approbation, they cannot distinguish true merit from false flattery, nay, they would be pleased with adoration. They try to make impressions on others by various means. Some would suffer pain in order to be pitied, rather than remain unnoticed.

No man will object indiscriminately against the feeling which causes a desire of pleasing; it is the source of many pleasures in society; but its too great activity, combined with some other sentiments, and not directed by reflection, makes many

women weak and fastidious, or mere objects of amusement, by their pretty nothings and infantine airs. It is still worse, if such fine ladies be full of capricious fancies. Females who are governed only by this feeling, will remain alluring objects for a moment, but they will not obtain a durable interest in the affections of a sensible man. It follows, that the sentiment of the love of approbation being in general too strong in women, does not stand in need of being exercised; it is, indeed, their greatest enemy. Farther they delight frequently in a world of fiction and eccentricity. The softer feelings and the religious sentiments are commonly stronger in women than in men. Females therefore become easily the favorite tools of priesthood.

Females naturally have less courage and destructiveness than men, and more Cautiousness. Fear, therefore, ought not to be cherished in them; but it ought to be treated as cowardice. To fear a cat, a mouse, an insect, a little noise, &c. is irrational, looks infantine, and indicates altogether a false susceptibility of mind, or a too great nervous irritability. The ardor with which some females amuse themselves in hunting, shooting, and gaming, appears, on the other hand, equally objectionable. In short, while coarseness in females is to be avoided; delicacy and refinement of taste must not be confounded with weakness.

The conduct of females in general is unstable ; their opinions are often wavering ; they think too much of incidental occurrences ; of actual events ; they wish to enjoy immediately ; are moved by momentary impressions ; do not like to work for a future period ; while men have more frequently the end in view. Females undertake many things ; they are warm by fits and starts, but their warmth is soon exhausted.

Indeed, hitherto the greatest enemies of the female sex reside in their own feelings. Many civilized women please, rather than inspire with respect. They prefer alluring manners to permanent friendship. Many are charming, romantic, vain, or fine sentimental ladies. They are occupied with trifling things, mere beings of sensibility and pleasure, refined by novels, poetry, and gallantry ; but they should never forget, that they will always be considered as insignificant when they wish only to be fine ladies, and not to fulfil the duties which nature has assigned to them.

Thus, the feelings and their combinations in women, tend much to make them dependent. To be independent, it is not sufficient to be endowed with the feeling of duty and justice as the principal motive ; these must also be combined with indifference about the opinion of others when unjust, with courage and perseverance, in order to resist

difficulties and obstacles, and to attend only to the aim, and to think of the necessary means.

In order to understand perfectly the great phenomenon observed at all times, that one half of the human species has excluded the other half from all participation in government, it is necessary to compare also the understanding of the two sexes.

The intellectual faculties, though, like the feelings, essentially the same in both sexes, are widely different in power in the two, and in the actual state of things men undoubtedly enjoy the superiority. I by no means say, that women are made to be the toys of men, much less their slaves; and I wish that their understanding may be more cultivated than it usually is, not by Latin and Greek, but by useful knowledge. Let their whole character be prepared for the important duties in their future stations aswife and as mother. Whoever will attend to female education, will find that they acquire many notions of individual things; that they excel in the recitation of anecdotes and descriptions of manners, in the epistolary style; that they are admirable in details, but dwell on effects, without tracing them back to their causes. In arts and sciences females rarely show themselves masters, they most commonly remain apprentices. Those female authors who defend their sex, maintain that their education is neglected, and that on

this account alone they are inferior, for they are all obliged to admit the actual inferiority of the fair sex. Yet there can be no doubt that more girls than boys learn music, drawing, and painting, and that many females cultivate these arts exclusively. Why then, we may ask, do their compositions so rarely equal those of men? Whenever great combinations, deep reflection, discrimination, and general abstraction are required, when principles and laws are to be established, females in general remain behind. A shawl or a ribbon will soon absorb their minds, and make them easily neglect any philosophical discussion.

Thus, there is a natural difference between the two sexes, not in the number, but in the degrees of the primitive powers of the mind. Some are stronger in women, others stronger in men, and both sexes seem to be destined to different occupations in society. Indeed no education will change the nature of the innate dispositions. Let, then, each sex, and each individual, be cultivated and employed in those things for which he is fit. The claim to justice and merit is equal in man and woman; their duties only are different. Females are not destined in any circumstances to be slaves, or mere patient drudges, nor are their duties limited to those of chaste wives and good managers of their families only; women are required also to direct the education of their children, and to be agreeable and intelligent companions to their

husbands. Let their understandings be cultivated by useful knowledge; by the study of the human mind, and the principles of education, and of their duties in the direction of their families; let their intellect be improved by the study of history and of arts and sciences. Girls commonly learn only objects of secondary importance, mere accomplishments; and hence, when they arrive at the age of being united to a husband, they are seldom capable of supporting permanent friendship, by the elevation of their minds, and the steady practice of the domestic virtues. Many do not know how to guide themselves, and still less their offspring, their servants, and household affairs. Indeed, if the fair sex go on as they have done hitherto, they cannot repine that they have no share in political concerns. If their minds do not take a more serious and more solid turn, they may govern in drawing-rooms, where delicate feelings and polite manners are attended to, but they will have no permanent influence on the laws of society.

I beg leave, however, to repeat, that I admit individual exceptions, and speak only of the sex in general. I even think, that legislators are wrong to take it for granted, that the intellect of men is, in every case, superior to that of women. Some females contribute more than their husbands to the fortune of the family: Is it then not unjust to permit the husband to spend what the wife has gained, and to deprive her of power, when, in

point of fact, she might manage affairs to the advantage of her family and of herself ?

I would not like to be misunderstood and certainly not to be thought hostile to the fair sex. I most sincerely wish their advancement in every respect. In my opinion there should be a greater number of better wives, if there were a greater number of better husbands. But I think of women what I say of nations. If they want a Saviour from without, they are not yet fit for emancipation. Let them do the work necessary to this change, and they will no longer complain of inferiority. Let the girls cultivate their intellect by practical knowledge. Let them aim at solidity as well as polite and refined manners, and not at prudery. This latter cannot be an indication neither of sense nor of taste. Society where both sexes meet together in social intercourse, is most conducive to mutual improvement, to delicacy of sentiment and language. Why do gentlemen exclude ladies from their society when they meet to speak of scientific objects ? Ladies of former days probably have shown less taste for such conversations. Or is it the fault of the gentlemen ? In that case let our females direct the attention of men to science and arts, let them prove that they have the same desire of knowledge as their pretended Lords, and are not occupied merely with finery, ornamental dress, and showy appearances. Let them emancipate themselves. But as long as they can read

the Old Testament from one end to another, and can listen to sermons where expressions are used, which no delicate person would pronounce in polite society of gentlemen, whilst they think it indelicate to speak at table of the leg of a fowl, I cannot help thinking, that there is some want of reflection either in the gentlemen who introduces such customs, or in the ladies who submit to them, or in both. I know the power of custom, but if the fair sex cannot overcome such fashionable but nonsensical trifles, how can they imagine to be able to legislate for society at large ? I am sorry to say, but, indeed I cannot perceive any arrangement of nature that can lead me to expect that women in general will cease soon to be considered as subordinate to men in the higher intellectual capacities. Their feelings obscure easily their understanding ; this is evident in their religious manifestations. In social life they seize quickly the useful and practical part of things, but they seldom take general and comprehensive views. Yet let the many gratify their ambition ; let them endeavor, if they please, to acquire the same degree of talent, energy, penetration and perseverance which we see in many men ; but, till they have acquired it, let them cherish order, and exercise the virtues of their actual condition in society, rather than to present themselves in a sphere for which they, generally speaking, are not fitted.

CHAPTER VI.

EDUCATION OF NATIONS.

THE first idea that presents itself in this Chapter, is to inquire who, according to the laws of the CREATOR, is intrusted with national education, this being taken in the most extensive signification of the word. In treating of the education of children, I took it for granted, that parents are their natural protectors and leaders, and that they ought to consider it their duty, to favor the happiness of their progeny. On the other hand, parents, being free agents, are to be declared answerable for their influence on their offspring.

Nations and governments are often compared, the former with children, and the latter with parents. The analogy, however, is very inaccurate, nations never owing their existence to their governors. This comparison is further objectionable, since nations always provide for the living of their rulers. It seems therefore more reasonable to think, that individuals unite under determinate conditions for the sake of the common good ; and submit, on that account, to an appointed leader or director. But who could fancy that this submis-

sion can be agreed to at the expense of the general welfare?—The sovereignty of nations seems evidently to be a law of the CREATOR, and will be acknowledged in proportion as men become intelligent and virtuous.

Yet, let us suppose what governors like to persuade mankind: that they exist by the grace of GOD, viz. allowing this to be in the same way as every arrangement is made, and every kind of order is established by the will of the CREATOR; but let us add the question, whether GOD, the Father of all, according to reason and Christianity, could establish civil and religious governments for the sake of any absolute power and private pleasure, independent of general happiness?—Reason says, that wherever there is a community, its aim can be the public good alone. This principle prevails as regards families, tribes, nations and mankind at large. Christianity teaches the same doctrine. JESUS CHRIST, instead of assigning privileges to his disciples, abolished all personal supremacy and prerogatives. "Ye know," said he, "that the princes of the Gentiles exercise dominion over them, and they that are great exercise authority upon them;—But it shall not be so among you, but whosoever will be great among you, let him be your minister, and whosoever will be chief among you, let him be your servant." (Matt. xx.) "The disciples had disputed among themselves who should be the greatest; and he

sat down, and called the twelve, and said unto them, If any man desire to be the first, the same shall be the last of all and servant of all." (Mark ix.) He ordered them to be peaceable, humble, charitable, and satisfied with their daily bread. The following text, "Render unto Cæsar the things which are Cæsar's, and unto God the things that are God's," (Matt. xxii.) commonly quoted to prove that Christianity is not against absolute rulers, bears, in my opinion, a more sound interpretation than is commonly given to it. Christ imposed upon his followers a new code of morality, which was the will of his heavenly Father, and incumbent on all his disciples, Jews and Gentiles: one of its great commandments, applicable to all members, is to love our neighbor as ourselves. Now, I doubt, whether common sense can allow privileges compatible with such a doctrine? If we maintain that Jesus Christ sanctioned absolute power, because he did not interfere with it; it may be said, with equal propriety, that he sanctioned every state of things, he did not mention. Is it not a natural consequence of his doctrine, that those who follow it, change their former manner of living, and abandon the abuses of preceding ages? at all events, even those who consider God as the true legislator, and themselves as the directors appointed by his special grace, must acknowledge that the aim of Christianity is the general happiness of mankind, and that all notions opposed to that cause, must be abandoned.

The reader, then, may easily suppose, that I do not intend to examine the means favorable to governments, in order to dispose nations to be satisfied with the good pleasure of their rulers, to keep them in ignorance and poverty, to force them to passive obedience, and employ them to mere selfish purposes, in short, to enslave them; on the contrary, my object is evidently to speak of the means which may enable governments to fulfil the only reasonable and moral destination of their existence. I take it for granted, that general welfare is the object of national education, and go at once to the inquiry how this is to be obtained.

In national education as in that of individuals, the same principles prevail. Those who wish to contribute to this great work must always remember, first, that they cannot create, but are confined to the laws of the Creator; hence, that they can produce certain effects only under conditions; secondly, that the faculties of the mind are innate, and that their manifestations depend on the cerebral organization; thirdly, that the special faculties of the mind are essentially the same, but more or less active in different nations; fourthly, that man acts from feelings rather than from intellect; and finally, that the feelings in themselves are blind, and that their actions must be regulated by reason. Convinced of these principles, they may endeavor to increase or diminish the activity of the individual powers, and direct them towards the aim of society.

With respect to the general preliminary principles of national as well as individual education, I refer to my other publications, where these points are examined with details ; even in treating of the means necessary to obtain the desired effect of national education I may be short, since they are the same as those explained in the preceding chapters.

Among the means of improvement, propagation occupies the first place, and crossing the breed is the surest way of changing races. Foreign invaders, who intermarried with the old inhabitants, have greatly contributed to change the character of different nations ; and new settlers who mix with the natives will be of greater effect than all sorts of other regulations. The northern provinces of Ireland are inhabited by Scotch, and by a mixed race of Scotch and the primitive inhabitants ; their character is known to be different from that of the Leinster people, and their cerebral organization is not less so. Tribes, by attending to the laws of hereditary descent during several generations, might be modified with greater certainty than by theoretical instruction in reading and writing, by hearing sermons and repeating prayers. Granted that governments have no right to force nations, except in conformity with the established laws ; they may, however, if they really mind the welfare of the people, inculcate the natural laws of hereditary descent, and find various ways to

favor their practice. Careless tribes ought to intermarry with cautious persons; fearful with courageous; gloomy with gay, &c. Natural morality and Christianity command nations to live in peace, and by crossing their blood, their faculties of body and mind may be strengthened and improved. The principle, Make the tree good and it will bring forth good fruit, is undeniable.

Thus, the knowledge of the laws of hereditary descent being the first and surest means of improving nations, deserves the attention of legislators and governors: it embraces the conditions of innate strength of body and mind; the causes of degeneration; the propagation of hereditary diseases; the number of inhabitants, or population; and the regulation of marriages. A military government, that institutes the conscription, such as it existed in France under the reign of Buonaparte, —that carries on war for several generations, and distributes all the honors only to soldiers,—is the greatest curse to a nation. Degeneration will be unavoidable, since all the better heads are sacrificed and the inferior allowed to propagate. On the other hand, when all inferior moral and intellectual organizations are employed as soldiers, and prohibited from marrying, the military line may be very useful to society. Hence, if standing armies be necessary, take up in preference those who enlist from laziness and disorderly habits, and who are under the influence of the lower propensities.

I think it necessary to add, that it is by no means my intention to degrade the military profession ; I acknowledge its usefulness and merit in time of necessity, as in a war of defence against foreign aggression. I even admit, that in order to resist with vigor, every member of the community should be exercised in the use of arms, and be obliged to defend his country in case of attack. The number of degenerated brains will always be small in proportion to the great bulk of the nation ; they will be easily kept in order, partly by the regular behavior and good example of their companions, partly by the severe laws of military discipline. Their number will also diminish by degrees, when all the principles of national education shall be practised. The great weight I lay on this proceeding depends on the means of purifying the race, by preventing the inferior organizations from propagating.

The next object of national education concerns what is commonly styled physical education, or the regulation of the vegetative functions. It includes the salubrity of air and light, cleanliness, food, clothing, bodily exercise, in short, corporeal health and strength, these being indispensable conditions to personal happiness and public usefulness.

In this respect, too, a good deal more than generally is might be done ; in taking for granted that

governments never act from selfish views, but always with the intention to favor the public good, since they are aware that they themselves die, whilst their nation continues and may be everlasting, and that therefore they calculate their measures not for momentary advantages, but for permanent results. This latter point, however, is too often neglected, though it is a characteristic sign of greatness in a legislator, if his regulations be lasting, viz. adapted to nature and her manifestations.

The preservation of bodily health and strength is of greater importance than legislators commonly imagine, and its neglect during several generations may greatly contribute to the fall of a nation. —Overgrown towns, capitals in general, after several centuries, would die out, if the inhabitants were not renewed by people from the country. In the same way whole nations may be weakened by various causes: they may degenerate, lose their energy, grow old, as it is commonly expressed, and become incapable to resist foreign invaders. Hence, whatever besides the innate dispositions of the body and mind, concerns the salubrity of habitations, the purity of air in the streets and houses, food, cleanliness, bodily exercise, &c. belongs to the scope of legislation. This chapter is vast, and includes every point conducive to health and strength.

In this as in any other respect, nations, like children, do not always understand what is the most advantageous to them. They are two often satisfied with temporary amusements, and neglect the conditions of permanent happiness. Legislators, therefore, be they hereditary and permanent, or chosen and temporary, might and ought to lead the community, and prepare their happiness, in the same way as parents provide for children.

The views which governments entertain of their right to interfere with the personal liberty of the people, are sometimes very singular. They often show indifference about things which do harm to individuals and to the whole of the nation, and punish as crimes disorders which are of little consequence. They may wink at debauchery, drunkenness, gluttony, luxury, &c. and bestow the right of hunting as a privilege ; they fix the quantity of wine which may be carried from one cellar to another, and inflict a penalty upon the transgressor, but license numberless ale-houses ; they grant only a small quantity of gunpowder to be kept in private houses, but tolerate gaming-places and lotteries ; they force the individuals to be sailors or soldiers, but have no authority to propagate vaccination ; they oblige medical men to study anatomy, and inflict upon criminals the dissection of their body as a punishment, &c. ; they allow the poor to multiply as they like, and force the rich to nourish the poor and their progeny,

&c. Who does not perceive that they never hesitate to interfere in whatever answers their own purposes, always under the pretext of the common welfare, but that they have no right to restrain the personal liberty in whatever is indifferent to them. It seems to me that, among civilized nations, every interference of the government should be allowed which tends to the commonwealth, and which is obligatory for every member of the society. Personal exceptions are unjust, they weaken by degrees the force of the laws, and at last destroy their efficacy.

The regulations concerning habitations and nourishment are of prime influence. The situation must be healthy, the air pure, its circulation free; hence the streets large, the houses not too high, the abodes and walks freed of every sort of ordure; dunghills and filth at a certain distance from dwelling-places and public roads. In short, it is necessary to enjoy cleanliness of every description, and pure air in every situation.

Nourishment must be adapted to the constitution, age, occupation, climate and weather. Nothing is wholesome or unwholsome in itself. In northern countries, and in cold weather, animal food is more easily digested than vegetables; these latter, on the contrary, agree better in the south and in hot weather; whilst a mixture of meat and vegetables favors best bodily strength in temper-

ate climates; but whenever animal food is well digested, it gives more strength to the body, and then vegetables, by feeding and multiplying domestic animals, should be changed into flesh, before they serve to nourish man.

Temperance and sobriety greatly invigorate the body and mind; intemperance and debauchery, therefore, should be restrained by all possible means. The natural wants are to be provided; and as Christians pray only for their daily bread, objects of refined cookery might be imposed with enormous duty, and drunkenness considered as a civil fault.

As bodily exercise particularly strengthens, as it invites to sleep, and secures against great disorders, it is to be generally encouraged. Gymnastic amusements may be established for all ages and for all classes of society. The Jews were ordered on the sabbath day to take a walk out of the city; and here rich and poor, young and old, master and slave, met and indulged in innocent mirth or in the pleasures of friendly intercourse. Moses, too, instituted three national festivals, not only for the sake of religion, but also to maintain national union. The gymnastic exercises and national games of the Greek and their good effects are generally known and admired. Why then are similar enjoyments and means of producing public spirit neglected by modern legislators?

Why are priests allowed to change the sabbath day into a day of gloom, whilst Moses wished it to be a day of cheerfulness ? The rich amuse themselves during the week, they have balls, or at least other parties of joy in which the clergymen themselves participate, but are the poor, who work from Monday to Saturday for their sustenance, to be entirely deprived of every kind of amusement ? Will they not naturally be drawn to ale-houses and gin-shops, or at least feel inclined to indulge in drunkenness or other animal propensities, since all public amusements even a walk in the fields are interdicted. The true sense of religion is misunderstood and the bad consequences are unavoidable. I have reason to believe that refined civilization on one hand, and gloom in religion on the other, are great causes of misery and many secret sins which ruin the health of many individuals. Priesthood should consider it their duty to be better acquainted with human nature and the laws of the Creator, which man never violates without suffering for it. Religion cannot be instituted to make man miserable or to prepare him for the mad-house.

Idleness, the great source of personal dissatisfaction and of many faults and crimes, should be declared a moral and civil vice, and as such prohibited. Every one should be obliged to exercise a profession ; mendicity entirely forbidden ; and

every citizen honored in proportion as he contributes to the welfare of his fellow-creatures.

Here a difficult matter presents itself concerning the poor and charitable institutions. The feelings are blind, and temporary relief of a feeling may do permanent mischief. This seems too much the case with charity. The poor are undoubtedly a burden to themselves and to the community at large ; I find, therefore, whatever contributes to increase their number objectionable, charitable institutions not excepted, since in providing alimentation for the poor they encourage their propagation. It is not my object to examine this matter, but I admit, with all enlightened political Economists that the number of population depends on the means of alimentation, though it cannot be said that the most populous countries are the most happy. I also refer the reader to the chapter on happiness, in the Philosophical Principles, Vol. II. of Phrenology, to make him understand my manner of thinking. I here confine myself to state the reasons which induce me to blame the obligation to provide for the poor. It is generally unjust to force others to work for our welfare ; and if the government think it right to prevent me from doing so with others, there is no more right to oblige me to nourish others, or to work for them. All donations of this kind should be voluntary. Governments may excuse this injustice by the public order and welfare, but would they

not act more prudently by removing the causes of misery than by increasing the number of the miserable? As general welfare is the aim of society, and as the poor-laws and charitable institutions augment the mass of misery, benevolent and charitable persons will do well to reflect and reason before they act, in order to bring their feelings in harmony with reason. It is a well known fact, that charitable institutions of any kind never diminish the number of those who stand in need of assistance; hence they give rise to permanent harm. Their nature should be changed, and it might be taken as a leading point, that public institutions are to be abolished, if they augment public misery, and to be encouraged as far as they diminish misery and establish general happiness. Public schools where useful knowledge is taught, institutions for blind or for deaf and dumb, and hospitals for unforeseen accidents, are of the latter kind. Legislators in general are not careful enough in reference to pauperism.

As sufficient alimentation is the first condition of our preservation, and as parents are bound by nature to bring up their children, those who cannot provide for a family should be prevented from propagation. On the other hand, as idleness and mendicity are civil faults, charitable institutions should be houses of correction or penitentiaries. The lazy and mendicants might be confined, in-

structed, educated, obliged to work, and kept till they can provide for themselves.

Again, as many occupations in society are hurtful to health, they must be superintended, particularly if youth be employed therein. Children, for instance, brought up in factories and hot rooms, unavoidably degenerate, and become sources of future misery.

The consequences of idleness and poverty being deplorable, activity and industry are to be patronized. Yet also this proceeding is not without inconvenience. Besides the misery which attends the working classes, in proportion as they degenerate, the happiness of the families who enrich themselves by industry and commerce is never lasting, since riches invite to luxury, and luxury occasions many evils of body and mind in individuals and nations. I grant that, in the actual state of things, luxury has the advantage of bringing money into circulation, and this ought to be attended to as long as great riches are collected. But the mischief begins if the owners spend above their income, or if they look out for gain by every means. In this way, a too great anxiety about riches, as well as great poverty, do harm.

Two important ideas concerning riches may be examined: 1. Great wealth is neither sufficient nor necessary to personal happiness; and, 2. Riches alone do not secure the duration of nations any more than that of families.

The first idea is confirmed by daily observation. A greater number of persons understand to make a fortune rather than to enjoy it; and whilst they collect and work, they are commonly happier and more satisfied than when they give up business and live in retirement. Personal happiness depends on health, and health on temperance. Now this virtue only requires a moderate income, which may be procured by a moderate exertion. This state again protracts the necessity to work, and keeps up an essential condition of happiness, which is no more possible without occupation than collecting wealth without activity.

The second idea is equally certain, and confirmed by history. Monarchical governments, therefore, who want a court and splendor, keep up rich families by primogeniture, and hitherto they endeavored to preserve their nation by poverty and ignorance. The examination of this subject belongs to political economy, a science destined, in my opinion, to discover means not only of collecting wealth, but of securing property.

This object is interesting both in a moral and political point of view; and here we find a new example of justice being inseparable from the general and permanent happiness of mankind. Rich families left to themselves degenerate. Now is it not evidently a great injustice, that degraded children enjoy wealth, whilst active and intelli-

gent members of society are deprived of the possibility to ameliorate their situation, as it happened under the feudal system? The bulk of a nation living in that state is miserable, and the resources of its government are exceedingly small.

On the other hand, if landed property remain in the possession of a few families, by the law of primogeniture, whilst others can enrich themselves by industry and commerce, the number of independent persons increases, welfare and comfort become more general, and the pecuniary resources of the government grow in the same proportion. Yet the injustice of primogeniture, and most likely the degeneration of families, will continue.

But justice is accomplished, personal happiness procured to the greater number, and the greatest advantage secured to the government, if all sorts of privilege be banished, every individual allowed to employ his talents, and to earn the profit of his labors and to spend his property as he pleases. Under such circumstances individuals and families will disappear, but the nation will flourish and last. There will be talents in abundance; active and intelligent citizens will collect riches, and lay great weight in the balance of national property and resources. Yet it may be observed that the aristocracy of many, founded on the moral system of utility, without previous education and without natural sentiments of manners and refine-

ment is the least agreeable. As rich families commonly degenerate and become soon poor again refined manners are neglected; even the fine arts are less cultivated, as long as the community stands in need of pecuniary resources. Marriages are formed according to the views entertained of wealth and comfort, however degenerated the parties may be under republican governments, therefore, particular care should be taken in education with respect to social refinement. All possible means which prevent rich families from degenerating, ought to be pointed out and attended to. If the things go on as they did hitherto and still do, there is no wonder that many are disappointed in their wishes and expectations.

Natural talents and dispositions being different, there can be no equality except that before the law, which is the same to all, and equally protects the poor and the rich; which allows to every one the use of his powers, rewards personal merit, and makes every transgressor answerable for the disorders he commits. The natural difference of mental dispositions, as to quantity and quality, and the innate love of distinction and superiority will always be a mighty cause of public disturbances. Rulers, therefore, ought to be very careful in regulating these matters, and they ought to know that, without morality all their labor is in vain.

Those who take interest in the duration of public prosperity, will highly appreciate riches, and acknowledge the great influence and power which they bestow on their possessors, be these single individuals or nations. But governors will find, that, to produce the desired effect, besides riches, many other conditions concerning body and mind must be attended to, and just the same as are necessary to the improvement and preservation of individuals. They will seriously reflect on what Lord BACON said to King JAMES, of the true greatness of Britain, viz. that in the measuring or balancing of greatness, there is commonly too much ascribed to largeness of territory, to treasure or riches, to the fruitfulness of the soil or affluence of commodities, whilst the true greatness requires a fit situation of place, and consists essentially in population and breed of men, so that every common subject should be fit to make a soldier. Supposing even that war might be avoided, a healthy, intelligent and moral breed of men is still the most essential condition of national duration and happiness.

The legislators in America might, nay ought to be particularly attentive to the laws of the new settlers. They may rely on the laws of nature being more powerful than their arbitrary conceptions. If they admit the races of men indistinctly, what they never do with animals, the country will and must experience more trouble than commonly

is thought of. The slave dealers know that one race of negroes is preferable to another, and why should it not be the same with the white. The evil will not be remedied in educating the children and in establishing poor-houses for the heedless adults. The number of troublesome citizens will rather increase by such means.

The influence of public institutions is conceived and should be conducted according to the laws of exercise, (as explained above, Sect. I. chap. iii.) Institutions in order to produce effect must be lasting; but every sort of institution, if continued for generations, will accustom whole nations to certain manners of feeling and thinking, and strengthen the special and individual powers of the mind.

In examining this subject, the following propositions may be laid down as principles. Nations, as well as individuals, act from feelings; feelings do not result from intellect, nor intellect from feelings; and every faculty, in order to be exercised, must be put into action. It may be added that, generally speaking, the selfish feelings are strong enough, and scarcely need any exercise, whilst those destined to forward the public happiness are commonly weak;—farther, that lessons and sermons never suffice to root out strong feelings, and seldom hinder their disorderly effects;—finally, that natural means may be employed with

peculiar advantage, in order to increase, diminish, or prevent the activity of any fundamental faculty.

As to the objects to be taught, two general remarks may be made: it is a great error to confine education to intellectual instruction; and, secondly, it is wrong to attend rather to theoretical than practical knowledge. Ignorance is certainly a fertile cause of error, but society at large will derive greater benefit from moral improvement than from scientific acquirements. Theoretical schoolmen, I am sorry to say, are too much attached to intellectual instruction, and not enough to the progress of moral conduct. Intellect, however, furnishes means to gratify the animal nature, as well as the nobler feelings of man. There should be schools for infants, children and youth, where positive notions of things, their usefulness and means of improvement, are communicated by the way of mutual instruction; where, at the same time, morality is shown in action and imposed as a duty; where refined manners are inculcated; and where physical education is particularly taken care of. I hope the time will come, when every one will learn to read, to write and to cipher, in order to be able to acquire new notions, to teach others that which he knows, and to assist his recollection; when all knowledge, extended according to age and particular classes of society, will be practical, from the most common notions of household affairs and ag-

riculture, to the deeper conceptions of arts and to the principles of sciences; when, at the same time, the feelings will be exercised and their actions regulated according to the principles of morality; when nothing will be taught or learned merely for the school, but every thing in reference to universal happiness; when the religious feelings will be cultivated in every one, not by words but in deeds, not by superstitious formalities, but in harmony with reason and with the intention to improve the fate of mankind; when even the animal feelings will not be neglected, but only employed as powerful means to assist the faculties proper to man, which alone are the aim of our existence; finally when all the powers of the physical, intellectual and moral nature will be cultivated in harmony.

From the preceding remarks it follows, that the principles of excitement are the same for governments as for parents. The same rule too, holds out with respect to the direction and employment of the special powers. Whatever contributes to the general happiness must be encouraged and commended, whilst the contrary is to be prevented and forbidden. Education can neither be confined to the body nor to intellect, nor to the feelings, but all sorts of powers must be exercised at the same time, and in harmony with each other. Reason, destitute of the assistance of feelings, remains cold, and feelings without reason are blind

and prepare numberless disorders. Finally the affective and intellectual manifestations of the mind depend on the body. Even religion, without being combined with understanding, unavoidably degenerates into superstition, and may become a frequent cause of insanity and suicide. Religion too, as well as intellect, without morality, will do more harm than good to society at large, in nourishing party spirit, self-esteem and all sorts of selfish feelings. Civil governments, who know that they are instituted for the common welfare in this life, will proclaim the same rules of moral conduct for every member of the community, and tolerate every religious opinion, provided it does not disturb peace nor injure the rights of others. They will confine their exertions to the actual state of society, and not interfere in any way with the life to come; they will remit all conceptions of that kind to every one's own conscience. There will be no creed obligatory, and none will enjoy particular advantages; in other words, there will be no religion of state. I also think, that such governments will consider it as right, to pay teachers only for things which are useful to every one, but refuse to charge the community with expenses for knowledge which is advantageous to single individuals alone. Spontaneous donations, or voluntary contributions, however, may be allowed to propagate knowledge of every kind, whilst the only duty of the government remains to protect every member of the community in his ex-

ertions, as long as they are harmless to others, and conformable to general justice. Taxation will be proportionate to the advantages which individuals derive from the institutions which must be paid for. The things indispensable to human existence and preservation, such as air, light, and fuel, will be exempt from all duties, and indirect taxes in general will be abolished. Nothing but the right of the strongest, and selfishness, can keep up the things as they commonly are, in contradiction with the principle that those who live have a right to exist ; that every one should earn but the profit of his labors ; that sinecures should be repealed, and idleness despised.

A religious reform in general seems necessary and desirable. Very few among those who allow themselves to reason, believe that the priesthood has the power of sending into, or excluding from, heaven. Christianity and common sense teach that every one should do his duty, and that he can do no more. Religious teachers, therefore, should be considered in the same way as teachers in languages, arts and sciences. Every one who has talent and time might study religious ideas, write and converse with others on them, in short, do as he pleases, provided he conducts himself in conformity with the principles of general morality. Every one might read the Scriptures of Revelation, and form his own opinion ; and every civil government should follow the example of the Uni-

ted States of America, and abolish priesthood as a political body, or as a necessary division of the government. JESUS expressly stated, that his kingdom was not of this world. (John xviii. 36.)

I am aware that the sacerdocy will object to such a reform, and do what they can to make man believe that there is no morality without religion, and no religion without their office, and that they deserve to be largely rewarded. I, however, cannot help thinking, that man has been, and still is, misled by priests, because he is naturally religious, and that priests ascribe to their influence what belongs to the power of the CREATOR. The time of what was called theocracy is over. I can, however, conceive, that where civil governments decide in every respect what people are permitted to do, religious as well as political opinions are dictated; but it seems natural to admit, that where liberal principles prevail, religious and civil liberty should go hand in hand. Yet there is still too much credulity among the great number of the congregations. They are occupied during the week in their worldly concerns, and on Sunday, without troubling themselves much with examination, they will listen to their clergyman; if he speak to their liking, and according to their feelings. Some teachers will cry against the great pope of Rome, but make at the same time the little pope in their pulpit, in sending all who differ from their manner of think-

ing, to eternal damnation, whilst they declare themselves and their followers predestined to eternal beatitude : This doctrine, indeed, is comfortable for the elect, and the congregation may say *amen* and sing Alleluia, but it shows also that common sense is sometimes wanted in religious considerations. I think it very wrong to leave these matters exclusively to a privileged profession, whilst they ought to occupy every intelligent mind. I shall mention a few well known remarks concerning the doctrine of the Sunday or as it is also styled Sabbath keeping. The Sabbath day is allowed to be a noble institution of Moses, who ordained it, as a day of rest for man and animals, hence a benevolent regulation for all classes of working people, particularly for slaves. The cessation of labor on one day of the week, ameliorates the condition of all laboring classes, and contributes to cleanliness, to the preservation of health and to the restoration of bodily strength. It also gives leisure for intellectual, moral, and religious instruction and meditation, and in fact a portion of the law was read to the Jews on the Sabbath day and their physical welfare was attended to. —No one can think that God in creating the world became literally speaking, fatigued, and wanted to rest and to refresh himself : (Exod. xxxi. 17.) and that this was the principal motive of the Mosaic law in reference to the Sabbath. It is only to be said that the Jewish language abounds in figurative expressions.

The Sabbath was farther commended to the Jews in remembrance of their delivery from the bondage in Egypt, and as a sign of the old Covenant.

Two questions, however, arise: 1. whether the *Jewish* Sabbath day is obligatory to the followers of Jesus; and 2. whether it is incumbent upon christians to keep the Sabbath in the same manner as the Jews did?

It is a fact generally known that the day itself has been changed since the time of the Apostles and the first Christians. [Acts xx. 7.; 1. Cor. xvi. 2.]

In reference to the 2d question, it seems to me that, as with Jesus the old covenant ceased and a new one began, the Sabbath as well as circumcision, both signs of the old dispensation, with all ceremonial observances prescribed for the Sabbath, are abolished, and that the Sabbath day is at an end altogether. The Jewish temple was destroyed, the Levitical priesthood, their sentiments, their church government, the whole tone of their worship, and all signs of the Jewish covenant were gone. If the Jewish Sabbath-keeping be incumbent upon Christians, I think the Jewish Sabbath year, and the Jubilee, too, ought to be kept up.

Farther, we read that Moses when he instituted the Sabbath, gave at the same time various other statutes, commandments, and moral laws which ought to be either kept or abolished together. Jesus rectified a number of the Jewish moral laws. He, for instance, forbid polygamy, which Moses had allowed; he abolished capital punishment of adultery, in opposition to Moses, and he made many other alterations as is evident from the sermon on the mount.

Moreover, if the Jewish manner of keeping the Sabbath were obligatory and so important as many say, it appears extraordinary that Jesus should have been silent about it, whilst he constantly admonishes his apostles and disciples of he great commandments of love.

Jesus himself did on the Sabbath several things at variance with the Jewish law. He went, for instance, with his disciples through the corn-fields and plucked ears,—he cured diseases and even said that the Sabbath was made for man and not man for the Sabbath, and that therefore the Lord of man is Lord also of the Sabbath. (Mark ii. 27. 28.) He even admonished his disciples to assemble and to sing to the glory of God: they were to be known by their good works and mutual love.

It is also known that the Apostles and first Christians kept the Lord's day in a different man-

ner in which the Jews kept their Sabbath. St. Paul called a holyday, on the New moon or the Sabbath days a shadow of things to come, (Col. ii. 14—17.) He positively stated that "he who loves one another has fulfilled the law."

It was, however, a practise among the first christians to assemble on the Lord's day, to sing, to break bread, to gather stores and to be instructed; in short they had religious assemblies upon the first day of the week as on the day on which Jesus arose from the dead;—as a festival of the Creation;—as a day of rejoicing and of holy worship. But a cessation upon that day from labor beyond the time of attendance upon their meetings is not insinuated in any passage of the New Testament, nor did Jesus or his apostles deliver any command to their disciples for the discontinuance upon that day, of the common offices of their respective professions. If it was their intention, they ought to have stated it, since they preached not only to Jews but also to Gentiles, but they never enforced the law of rest as in the Mosaic laws.

It is farther to be remarked that Pliny the younger in his letter to Trajan, where he made a report concerning the Christians, wrote that "he discovered nothing but that they were accustomed to meet together on a stated day before it was light, and sing among themselves a hymn to Christ, as a

God, and to bind themselves by an oath not to commit any wickedness, nor to be guilty of theft, robbery, or adultery, never to falsify their words nor to deny a pledge."

Finally, history tells us that Constantine first, A. D. 321, made a law for the observation of the Sunday throughout the Roman empire. The Sunday was declared a day of rest in cities and towns, but the country people were still allowed to follow their work. But in 330 the Council of Orleans prohibited, also, country labor, and declared it unlawful to travel with horses, cattle, and carriages ;—to prepare food ;—and to do any thing necessary to the cleanliness and decency of houses and persons.

The only thing I contend for is that the Sunday of Christians cannot be the Jewish Sabbath, neither as to the day nor as to the manner of Sanctification. Yet this institution is of great importance, but enlightened minds will take greater views of it than mystical persons are wont to do. It is childish to think that we can do any thing to increase the beatitude of the Supreme Being. The name of *divine service* should be done away. Let it be a day of rest, and of physical, intellectual, and moral instruction and improvement, and of religious adoration. It is also reasonable to communicate instructive lessons in the form of songs, and the music may excite the nobler feelings, but it is

pitiful to sing, in disharmonious tones, any historical narrative of the Jews, or incomprehensible metaphors of imaginary minds. In short, this institution might be turned to the greatest benefit and improvement of body and mind, among the lower, as well as the higher orders, whilst in the ordinary state of things it invites the former to disorders, physically and mentally speaking.—I refer the reader with respect to my ideas on the religious and moral constitutions of Man, to the 2d Vol. of Phrenology.

My writings in general may prove that the principles of true christianity alone satisfy my mind, but not christianity disfigured by popery or by any sacerdocy who substitute their inclinations for the will of God, and declare themselves infallible; nor Christianity that degrades the Creator and disturbs peace and general happiness. On the other hand, the aim of civil governments being the common welfare of society, it seems to me that intelligent rulers should enact regulations to that purpose alone, and protect, and even encourage religious ideas as far as they are conducive to, and in harmony with, that end; but they should not employ religion as a means of gratifying selfish views, nor allow the priesthood to treat religion as a trade; and certainly they should not allow the priesthood to undermine the happiness of man, nor any religious sect to enjoy privileges,

these being positively interdicted by Christianity. The public wants to be enlightened.

In giving freely my opinion, I follow the principle of Protestantism, which grants the use of reason, and I agree with them who think that no one has the right to impose his religious opinions upon others; that true religion consists in the fulfilment of all our moral duties; that the belief of this truth having been revealed, is a powerful motive to practise morality, and that this was the will of the great and all-wise Intelligence, who arranged the universe, who gave man his moral nature and the laws of reason.

On the other hand, I pity Mankind for not being able to bear the moral code of Christianity, and for not being ripe to enjoy religious and civil liberty. It is lamentable to see, that in some countries there are only masters and servants; that superstition, ignorance, and poverty are employed to keep the people in subordination, and to gratify the selfish views of their civil and religious leaders; and that even among civilized nations, where the best known principles of government are in vigor, the great bulk cannot be left to themselves, but must be conducted. I, therefore copy from Cowper's letter to the Rev. Walter Bagot: "Do I hate a parson? Heaven forbid! I love you all when you are good for any thing; and as to the rest, I would mend them if I

could, and that is the worst of my intentions towards them." And, from the Hints of a Barrister to the public, "Whoever sets the best example of industry, uprightness, charity, justice, benevolence, mildness, integrity, and all those practical virtues which are the basis, immoveable and eternal, of Christianity; such a man is the best teacher of religion which the community can possibly receive." On the other hand, I reject, as destructive, every doctrine which sows a spirit of sectarian bigotry; generates superstition; introduces discord into the circles of domestic life, depreciates the bonds of charity and peace, or even reprobates all practical virtues and righteousness as filthy rags, and which places peculiar doctrines above the authority of the Gospel, whose great tendency is, and ever will be, to excite the sinner to repentance and reformation;—to cultivate benevolence and justice, and to link together mankind in the bonds of peace and charity.

A favorable change is wanted, but it may be asked, who shall produce it? the governments, or the nations, severally or together? Hitherto nations are too much accustomed to be guided; and governors too fond of commanding and imposing their good pleasure as law. Both parties seem to be wrong. Governments, it is true, may succeed better and sooner, since they can follow a regular plan, and have greater means of execution. But as rulers are too much disposed to do what flat-

ters their selfishness, nations ought to think of their own welfare, and know that *vox populi* is *vox Dei.* Instead of expecting every improvement from their governors, they ought to work at their deliverance from tutorage. There will be masters as long as there are servants, and children depend on their parents as long as they cannot gain their own livelihood. It is conceivable that governments like to rule their subjects, but these are blameable for not using all reasonable means to gain and deserve their independency. They should be aware that a liberal government lets the people act for themselves, provided the common welfare does not suffer, and that, on the other hand, governments are despotic in proportion as they interfere with personal liberty, and prevent the public good. In fact, in many situations, when the things do not go on as they are wished for, nations may accuse themselves rather than their governors. By perseverance they will always obtain what they deserve.

Remarks of this kind are also applicable to the improvement of religious creeds. It is an historical fact, that the priesthood always wishes to keep religious ideas stationary, and that every religious reform began with individuals, or with the civil power. This will be the case as long as religious governors do not keep pace in knowledge and moral improvement with the community at large. Any church whose tenets were composed in dark

ages, and adapted to the capacities of ignorant people, will be divided against itself, whenever the public become enlightened, and it must end in its overthrow, if the leaders remain in ignorance, and confound the aim of religion with the means that lead to it. The former certainly remains the same at all times, and amongst all classes, but the latter must vary in different periods of civilization. It is as lamentable as repugnant, to hear ignorant teachers speak of the heavenly Father as endowed with qualities for which every reasonable person would disdain his neighbor. The evil is great, and deserves the serious attention of the civil and religious governors.

What, then, is to be done to establish civil and religious liberty? Is it sufficient to proclaim a reform? By no means. The French tried one constitution after another, and it is scarcely decided which suits them best. Civil and religious liberty may be the law of a country while slavery and religious tyranny continue. It happens that there is sometimes more religious freedom under absolute governments than in republics. Man does not like to obey and to revere, but he is fond of governing others. He contends for freedom for himself, but thinks to have the right to enslave others. When will stupidity and immorality, severally or jointly, cease to govern human affairs!

It is certain that the natural dispositions and their activity determine the progress of civilization in nations as well as in individuals. Ignorant people are fond of darkness, while enlightened nations cannot bear measures of obscuration. The French revolution abolished all external decorations and signs of distinction, but it was easy for BUONAPARTE to introduce them again, since the love of approbation is an essential feature in the French character. Any reform succeeds easily, if it be in harmony with the most active powers; but it will never take root, if it be contrary to the predominant powers, or if the necessary powers do not act. The doctrine of the innate dispositions cannot be taken too much to heart by those who wish to exercise an influence on the community. They may direct the given powers to different applications, but they can neither create nor annihilate. Many historical facts will be explained, and many erroneous opinions of governments will be rectified, when the innate dispositions are understood. Then, also, not only the different progress in the various branches of literature, arts, and sciences, but also their modifications, in different nations, will be easily conceived.

Amongst many instances which might be quoted, I shall mention the following. The Reformation, undertaken by LUTHER, and continued by CALVIN and others, gained more ground in Germany than in France, and it is more advanced in Scotland

than in England, and it turned out very differently in different countries. There is a great deal of marvellousness and of the reflective powers in the Germans and in the English, but many of the former will begin with examining how far it is reasonable to believe, and give up rather belief than reason; whilst the latter take belief as indispensable, and reason merely on interpretations. Self-esteem and love of notoriety are great in the English and French; but Self-esteem is proportionately greater in the former, and love of approbation, combined with form, in the latter. The English, in their display of show, betray their predominant feeling, and wish to possess or do what others cannot; for instance, to appear very rich in keeping horses, carriages, and many servants, dressed in shoes and white silk stockings; whilst the French wish to be approved of, and to attract the attention of others by a fine taste in their show-things. Thus, it is certain, that lessons will make impression, and institutions succeed, in proportion as they are adapted to the character of nations to whom they are given. Defective heads can neither excel in arts and sciences, nor in the refined principles of morality or Christianity.

The influence of institutions on nations does not only depend on their being adapted to the innate dispositions, but also on their duration. Their effect is insignificant, if they be transitory and can-

not form habit. Any new institution, like any new doctrine, in order to be of permanent usefulness, must become, so to say, incarnate, or be infused in the minds of the people; but then their influence is certain, since the innate powers being exercised during generations, increase, and act with facility. I copy a suitable passage from the introduction to the History of France, by CHATEAUBRIAND, read by himself to the Academie Francaise, in the sitting of the 9th of Feb. 1826.

"It has been said, that from the time of VESPASIAN to MARCUS AURELIUS, was the period during which mankind enjoyed the greatest felicity. This is true, if the dignity and the independence of nations are to go for nothing.

"Every imaginable kind of merit appeared at the head of the empire. Those who possessed those qualities were free to undertake any thing they pleased; they were shackled by no restraints; they inherited NERO's absolute power; they could employ for good the arbitrary authority which had hitherto been used only as an instrument of evil. What, however, did this despotism of virtue produce? Did it reform manners? Did it re-establish liberty? Did it preserve the empire from its approaching fall? No; the human race was neither altered, nor improved. Firmness reigned with VESPASIAN, mildness with TITUS, generosity with NERVA, grandeur with

Trajan, the arts with Adrian, the piety of polytheism with Antonine, and lastly, with Marcus Aurelius, philosophy ascended the throne;—yet the fulfilment of this dream of sages, was productive of no solid results to the world. No ameliorations are durable, none indeed are possible, when any act of government proceeds from the will of individuals, and not from laws and institutions; and the pagan religion, no longer supported or corrected by austerity of manners, transformed men into old children, destitute alike of reason and of innocence.

"There were, at this period, some Christians in the empire, they were obscure and persecuted, yet, with their despised religion, they accomplished what philosophy upon the throne could not achieve. They instituted laws, corrected manners, and founded a society which exists to this day." What a great lesson for legislators! It is easy to regulate, but to give the feeling for the law, requires time and more than to give orders.

In the examination of this subject, it is found that religious and civil regulations are degraded and improved in the same degree, and by the same reasons. Stupid and ignorant people are superstitious, and believe in the good pleasure of their absolute rulers. Whoever is not able, or does not dare to think, or does not feel contradictions and absurdities, is unfit for a refined religion

and civil liberty. Understanding, indeed, is the first condition of civil and religious, as well as of personal and moral liberty, and ignorance a fertile cause of superstition and slavery. Understanding improves plants and animals, and it is necessary to the improvement of nations and of the nature of man. The Germans, expressing civilization by the word aufklaerung (enlightening,) indicate that they consider intellect as the basis of improvement.

The great point in this discussion is to determine, first, the origin and cause of liberty, and then the means of establishing and maintaining it. None of the faculties, common to man and animals, conceives the idea of civil liberty any more than that of religion. These conceptions result only from the human powers, and are retarded in their progress in proportion as they are influenced by the animal powers. The animal feelings are selfish, wish for personal advantage, like to take the first place in society, and dispose to religious intolerance and civil despotism. Hence, a nation is unfit for liberty in proportion as the animal powers are predominant over those proper to man. Courage, bravery, and stubbornness to death, are by no means sufficient to establish this happy state of society. Even the higher animal feelings, as attachment, love of approbation, cautiousness, acquisitiveness, and the perceptive faculties, are incapable of securing it. The animal nature, it

is true, is powerful to oppose despotism, and so far conducive to liberty. Whilst timid, poor, and ignorant people remain slaves, the courageous, intelligent, and industrious seek for independency. In consequence, instruction and industry are the great means of establishing liberty, whilst ignorance and poverty are its greatest enemies. Industry procures riches, and these enable the possessor to cultivate his understanding. It is, therefore, not astonishing that all those who treat of political welfare speak of industry as necessary and favorable to liberty. But those who think that industry and riches are sufficient to secure liberty, are mistaken; they evidently confound the means of establishing this great blessing with its primitive source, and with the means of maintaining it. Riches *alone* being a great cause of degeneration in body and mind, are incompatible with permanent liberty. The same uncertainty of things continues, even if riches be assisted by understanding, since the motives of all actions still remain selfish and of the animal nature.

With the faculties proper to man morality begins, and by their influence the animal nature is directed, every kind of privilege abolished, the number of public officers who require emoluments diminished, every individual permitted to use his talents as he likes, provided he does not injure others; every community allowed to regulate its special concerns, personal merit alone rewarded,

the general welfare thought of, in short, civil liberty acknowledged. And if such a liberty be granted in worldly affairs, it is still more necessary in things and opinions relative to the life to come and religion. The effect of feelings proper to man can become reasonable only by its union with the reflective powers, and natural morality is a corner stone of the preservation of any society.

On the other hand, though the human nature is the source of civil and religious liberty, yet the faculties proper to man are not capable either of establishing or of warranting liberty. To that effect they need the assistance of instruction and of the animal powers, particularly of industry, or acquisitiveness, self-esteem, courage, and perseverance. In order then to establish and maintain civil and religious liberty, the whole man, his vegetative, affective, and intellectual faculties must be exercised, but the animal faculties constantly subordinate to those proper to man, that is, natural morality must prevail.

In this way we have a criterion to decide whether, and how far, a nation is fit for civil and religious liberty ; whether, and how far, liberty which is granted or gained can last ; and whether, and how far, governments earnestly prepare the nations for that happy state. In the same way, those who wish to forward liberty, may conceive

what is to be done to secure general and permanent felicity, and why hitherto all partial means could not succeed. Union and morality alone can save the future happiness of the United States of America. Being divided or without morality they will have the fate of the ancient and modern nations of the old world. Intellectual education alone cannot produce the desired effect, whilst the animal feelings predominate and physical education is neglected. Let the legislators be aware of the detrimental consequences of selfishness, luxury, ambition, vanity, of the animal feelings in general, of all causes which contribute to the degeneration of body and mind: let them be particularly careful about pauperism on one side, and great riches on the other, about idleness, degeneracy of the race and immorality. Praying alone, and religious ceremonies will not remedy natural evils and the neglect of the natural laws.

A delicate question too, viz. whether any nation of those we know of, can bear the Christian religion in its greatest purity, and a republican government in its strictest sense, may be answered in the negative, on account of the animal nature being still disproportionate to that proper to man. In speaking of a republican government in the strictest sense, I mean a state of mind, where every one sacrifices his private interest to the common welfare.

In supposing then that any ruler may have the best intention to fulfil his duty, I conclude this chapter with repeating the points indispensable to his success. Let him become acquainted with human nature being threefold, with the innateness of the affective and intellectual faculties, with their dependence on the cerebral organization, and with their modifications in the nation he governs. Besides, let him understand that every innate power tends to action, but that the motives of the same action may be very different; that regulations founded only on truth and morality can last, and that the physical, intellectual, and moral nature of man must be cultivated in harmony. Farther, an important point for him is to know to employ every one according to his natural gifts and talents, be it as servant, soldier, artisan, merchant, artist, teacher of any kind, legislator, superintendent or president. He also must be aware, that various talents are given to all classes of society, to poor and rich, to country people as well as citizens; and that natural nobility and personal merit of talent and virtue alone deserve distinction.

In republican governments on the other hand, the electors must keep in mind that intellect is not morality, that individuals must be judged of by their actions and not by their speeches, in the same way as the tree is known by its fruit, and that no one who strives for private interest and for-

gets the common welfare, should be at the head of public affairs.

CHAPTER VII.

A FEW IDEAS ON PUBLIC AND PRIVATE EDUCATION.

Various opinions are entertained upon the question, whether public or private education be preferable. The term education is here taken in a limited sense, and the answer would be easy, if education were what it ought to be. In the actual state of things, the greater number of parents cannot adopt the private mode of education for want of pecuniary means. They must have recourse to public schools, if they wish to give to their children any education at all. The question, then, concerns chiefly the richer classes of society.

There are advantages and disadvantages on both sides. Generally speaking, in private education, moral conduct and religious principles may be more carefully taught, and the natural dispositions better exercised. But here we must suppose the governors to be of superior ability. Such persons, however, are not so easily found. On the other hand, private teachers and servants

kindle very often inferior propensities, which would remain inactive were the children sent to public schools. Again, as the education of boys and girls must be conducted in a different manner, particularly in large towns, several day or boarding-schools become necessary. And if in these the moral conduct be particularly attended to, they will combine the advantages of a public and private education. In them, physical education can be better attended to than at home; common play grounds and bodily exercise can be more easily procured. Such abodes are commonly in healthy situations, and better teachers may also be provided. It is of advantage to children to afford them opportunities of comparing their talents with those of others. When alone, they easily think themselves above all other children, but when together, they often feel their inferiority. The less intercourse we have with others, the sooner we are satisfied with ourselves. This happens with children as well as with adults. Those who have travelled with reflection and without prejudice, lose in many respects their national pride. They find that every where there are good and bad, ignorant and well-informed persons. Whoever remains confined to his own small circle, thinks all other society inferior, partly through a natural attachment to his accustomed manners, and partly through his not knowing what others are, or what advantages they possess.

Knowledge of the world, of different characters, of manners and social intercourse, is an important point in education. It is easily acquired in public institutions. Children soon learn to distinguish between the different manners of feeling and thinking of their companions.

Greater uniformity in manners, more mutual attachment and general benevolence, more order and greater readiness to obey and to depend on their superiors, may result from public education. There the feelings, in general, may be more easily exercised and directed, because society is indispensable to that purpose, and private education can never afford the same opportunity. Finally, the great effect of emulation is entirely lost in private instruction; and emulation may be necessary to some children in order to push them on.

Thus, even in the actual state of things, public institutions are preferable, and they will be far superior, if once regulated according to sound principles and adapted to human nature.

Conclusion.

The great object of education is, not to create, but to prepare, to develope, or to impede, and to direct the natural dispositions: vegetative, affective and intellectual. The nature of the fundamental powers, and the conditions on which their

manifestations depend, must be known, to enable us to cultivate and direct them. The difference between the feelings and intellectual faculties, is particularly to be attended to. Then, if the means of excitement and those of direction be employed, as I have detailed them, arts and sciences will improve, moral evil will diminish, and mankind will become more happy. I do not flatter myself, however, that in the present state of mankind, the most perfect education can abolish all disorders. Hence, institutions of another kind are necessary, which I shall speak of in the following pages.

APPENDIX.

ON THE CORRECTION OR REFORM OF MALEFACTORS.

As individuals differ exceedingly from each other in the innate strength of their faculties, there can be no doubt that adults, as well as children, if entirely left to themselves, and to the motives which spring up in their own minds, would not all be influenced either by the same number, or by the same kind of motives, nor would each motive act with equal force in all. Besides, the faculties which produce the lower propensities, do not of themselves produce good actions, and as they are stronger than the faculties proper to man, legislation is necessary to direct mankind. In regard to many particular acts, the government must command what is to be done, and forbid what is not to be done; seeing few individuals possess so favorable an endowment of dispositions as to be naturally prone to virtue, or to have the

law written in their hearts. Now, the general aim of all legislation ought to be the happiness of mankind, combined, as far as possible, with that of each individual; or, in the language of Phrenology, it ought to be to establish the natural morality of man, confirmed by true Christianity. The lower animals have no conceptions of morality, because they do not possess the faculties which produce the moral sentiments and reason. Hence, those faculties which are proper to man alone, conceive the necessity of legislation, and without them there would be none in mankind any more than in the animals.

Definition of Legislation.

I take this expression in its most extensive signification, and conceive it to comprehend the regulation of the manner in which all our faculties ought to be employed. Positive legislation has been, and still is, very different in different countries. The same actions have been and still are considered now as crimes, and then as virtues. The first great object is to distinguish natural from positive laws. It appears to me that both ought to be the same, and that the natural laws, in as far as they are known and admitted, ought to be declared positive, and to guide the actions of man. No one, therefore, should endeavor to make laws, but only to discover those made by the CREATOR, to submit to them, when discovered,

as to his will, and to dispose others to follow this example.

Positive laws are divided into Divine and Civil. The former are given by God, the latter by human legislators.

The question which naturally occurs is, whether there ought to be differences between the natural, Divine, and civil codes. Hitherto thinking people have not agreed, and the one makes war against the other ; but I am of the decided opinion that mankind cannot become happy till the laws of the Creator are put into practice. To say that the revealed law is not the same as the natural, is to suppose that God is not the Creator of mankind, or that he has been in contradiction with himself at different times. Such notions seem to me absurd, and I cannot admit any interpretation of the revealed law, which is evidently in contradiction with the real nature of man. Moreover, since man cannot create, he ought not to set himself up as an inventor of laws ; nor attempt to control the course of Providence, or counteract the nature of things. As already said, he should try to discover, and having discovered, to submit to the arrangements of the Creator with respect to his vegetative, affective, moral, and intellectual nature.

Civil legislation is necessarily divided into different branches, but they ought all to have constantly only one and the same aim, and to be the result of one and the same spirit. Hitherto selfishness has been the principal object of all civil legislation, and of every branch of it. Soldiers wish for war, and an opportunity of spoliation; lawyers also have too constantly in view their own special advantages; and the members of the ordinary professions do not think it necessary to conceal, that the end and aim of all their exertions is selfishness. The same anti-social principle is visible in all worldly affairs; and even the clergy, whose employment is to prepare man for eternity, too frequently show that selfish motives are in fact the mainsprings of their conduct. This overwhelming flood of selfishness must abate, or the general happiness of mankind remain an impossibility. There is only one permanent legislator, viz: the CREATOR, and whatever erects itself against his institutions, or deviates from them, is usurpation and folly.

It is certainly a difficult task to discover clearly the law established by Nature, and to bring all branches of legislation into harmony with the Creator's will. Happily, however, Nature has few laws; but it is of great importance to know that she never admits of an exception, and punishes severely every neglect. This subject being of the highest importance, any attempt to elucidate it

cannot be considered as an idle occupation, and is the true object of a philosophical catechism, which I have published separately.

In this summary view of criminal legislation, we may consider legislation in three points, viz : its aim ; the means necessary to attain it ; and the persons subject to the law.

Aim of Legislation.

Legislation begins with the sentiment of duty. In my opinion, the duty of man, according to the will of the Creator, consists in general Benevolence and Reverence. Hence the natural law requires more than the civil. Justice, according to the latter, is merely passive, viz : not to take from others that which belongs to them ; while, according to the former, we are obliged to do to others what we wish they should do to us. Thus Christianity coincides with the natural law. Love thy neighbor as thyself, is the touchstone of all legislation as to its aim.

Means to attain the Aim of Legislation.

The second part of legislation concerns the means necessary to attain the proposed aim ; but this point is not yet accomplished. Either, therefore, those who have it in their power do not earnestly wish for it, or they have not intellect enough

to choose the necessary means, or the general aim of legislation is not kept constantly in view. This field is extremely extensive, but without the reach of my study. I shall confine myself to a few remarks, with respect to criminal and penal legislation, which certainly has improved in modern times; first, with respect to the means of preventing crime; and, secondly, with respect to those of correcting criminals.

There were ages when criminal legislators thought it their only duty to punish or to revenge themselves on those who were disobedient; the animal powers dictated the penal laws, and the feelings proper to man had no share in them. Now-a-days, it is admitted that the penal code ought to have for its objects the prevention of offences against the welfare of society, the correction of those who have failed in their duty, and securing the community against incorrigible members. This aim is laudable; but as it is not attained, we are led to conclude that the means employed to effectuate that purpose are not the best that might be chosen.

Various kinds of punishments have been, and are inflicted, in order to deter men from committing criminal actions. Malefactors are deprived of their personal liberty, and are confined to prison, for a shorter or longer period; some even for life. They are treated with more or less severity;

some remain idle; others are condemned to hard work. Some are exiled or transported; others put to death.

Experience, however, shows, that punishments alone do not produce the desired effect. Even at an execution for stealing, pickpockets are sometimes busy committing their depredations. I do not say that punishments are useless; I only say, that they by themselves are not sufficient to prevent faults and crimes. Hence governments must have recourse still to other means. To choose these means correctly, it is necessary to discover the causes of criminal actions, for crimes will cease to be committed as soon as their causes are removed.

The most important way of preventing crime, is that of improving mankind by every possible means, and especially by those spoken of in the preceding pages on education in general, and on that of nations in particular. Let the inferior races, whose actions are stigmatized by crimes or disorderly living, be prevented, as much as possible, from propagation; for it is a fact well known to those who have attended to the subject, that the organs of the animal passions, like those of the other faculties of the mind, are hereditary. Moreover, let ignorance, idleness, intemperance, and poverty, which are the principal causes of crimes, be prevented, and there will be little occasion for prisons.

In the General View to this work, I have considered the great influence of ignorance on the moral conduct of man. Instruction, indeed, will greatly improve the human character, and the facility of acquiring it in our days is a great blessing to mankind. It is therefore the duty and interest of wise and paternal governments to diffuse instruction as widely as possible, according to the capacities of the people, and according to local and particular situations; and whoever wishes to promote the moral conduct of mankind, and insure their happiness, will favor public institutions for useful information. But knowledge is not virtue, and more attention than hitherto has been given, must be paid to the moral improvement of mankind.

It is both more effectual towards promoting the welfare of society and more agreeable, to correct morals, than to punish crimes. To that end it ought to be a serious aim with governments, to adopt means to exclude idleness and intemperance from society. Children should be accustomed to sobriety, and the practice of intemperance despised, and represented as degrading a sensible being. Every person found intoxicated in the streets should be taken up and confined for twenty-four hours, and fed on bread and water.

Persons when drunk are deprived of the use of their reason, and often inclined to abuse their ani-

mal propensities ; and hence the welfare of society requires them to be placed in a situation where they can do no harm, and which may contribute to their correction. The criminal records of every country bear evidence of flagitious crimes committed, and much misery inflicted, of which drunkenness was the proximate cause. Governments are therefore wrong in licensing numberless ale-houses and gin-shops, and in affording great facility of pawning.

In the Chapter on National Education, I have already said, that in a well regulated state, no poverty ought to be seen, and no mendicity tolerated ; that each citizen ought to exercise a profession, and each beggar to be shut up, and to be forced to work in public employments ; that charity is misapplied, and idleness rewarded, if industrious people be obliged to support the poor. This subject, being of the utmost importance, deserves a particular examination, and the repetition of some ideas does not seem to be out of place. The law obliging the rich to nourish the poor, is an indirect infringement of personal liberty, and in opposition to the basis of a free government, which admits private property, and encourages every one to use his talents, in as far as is consistent with the general happiness of the nation. The poor laws encroach on this right, and do harm to society. They in fact hold out to the profligate, the idle, and the imbecile, an invitation

to act without regard to the consequences of their actions, and promise them, that if they are overtaken by the calamities which nature has attached to heedless conduct, the virtuous and considerate shall be made to bear the burden for them.

If the poor, an account of their right to personal liberty, cannot be prevented from marrying, the rich, for the same reason, cannot be forced to nourish them. It is an infringement of the personal liberty of an industrious citizen, to be compelled to support a lazy drone. If the poor must be permitted to marry, after the consequences are pointed out to them, then, at least, let every one be equally free; let him who gets children provide for their subsistence; and let him who labors reap the whole fruits of his own industry.

But, it may still be said, that whoever lives has a right to the prolongation of his days, and that, hence, the necessitous must not be allowed to perish. Strictly speaking, there is no doubt that those who exist have a right to partake in whatever nature produces. But civil laws are destined to keep order, and to regulate property. Now, I am willing to admit, that humanity calls upon us to preserve those who actually exist; but it appears to me to be impossible permanently to ameliorate the condition of the poor, except by preventing them, by some means or other, from excessive propagation. In the first place, It is a

general law in nature, and it holds good in the case of mankind, as well as in every other species of animals, that every germ produced is not permitted to prosper and to multiply. As things are now managed, however, the best and most considerate of the race, are those who are most restrained from multiplying ; because they see the evils, and endeavor to avoid them, while the worthless and unreflecting indulge their propensities without fear, and fill the world with misery. This is exactly the reverse of what it ought to be. Moreover, for the sake of general order, sailors and soldiers are prohibited from living in matrimony, and why should not the same liberty be taken with the poor ? If they can show that they have the means of supporting a family, they are no longer poor, and the interdict would not apply to them. Many things are forced upon, as well as interdicted to individuals, for the sake of general happiness; and this being the principal aim of society, I cannot conceive a reason why the abject poor may not be hindered from marrying, for the general good, just as they are excluded, for the same reason, from directing the government.

The law should harmonize with the manners and morals of the day, the punishment proportioned to the crime, and no hope left to the criminal to be pardoned.

Finally, the surest and most universal means of preventing crimes, would be, if selfishness could be made subservient to general benevolence, and if morality could become the leading aim among all nations;—then the kingdom of Heaven would in fact arrive. The influence of this principle cannot yet be felt by mankind at large, and many may therefore say, Why, then, do you speak of it? I answer, Because it appears to me that the arrangements of nature admit of such a state, and that men require only to understand and practice her laws, to bring it about; and as the tendency of the mind is to approximate towards truth, and to appreciate it when discovered, I am not without hope, that the time may come, when the higher sentiments shall prevail over the lower propensities, and benevolence over selfishness. Truth, whether admitted or rejected, is and remains always truth. At all events no encouragement should be given to the abuse of the lower feelings, nor any facility offered to commit crimes. Bigamy, for instance, and seduction are facilitated by the permission of marrying without a certificate of any kind.

I am convinced, that in proportion as the preceding means are neglected or attended to, offences and crimes will be committed or prevented; and that by applying them in practice, mankind will improve their condition more than by punishing malefactors, and praying the Heavenly Father

for his assistance, while they neglect the natural means of preventing crimes, and producing good. The blessing of God will follow as soon as we submit to his laws ; but prayers for it, while we contemn them, are impious and absurd. Prisons are not become useless by building churches and by the influence of Bible and tract societies. However, I do not mean to say, that Christianity is ineffectual in preventing crimes ; I only maintain that all means, natural and supernatural, should be employed.

Natural means of correcting Malefactors.

Let us now examine how far the second point of criminal legislation, viz. the correction of malefactors, has been attained. Experience shows, that punishments alone do not correct delinquents, any more than they prevent disorders, and that the common way of treating criminals depraves rather than improves them. This truth is more and more perceived, and some practical results have already taken place, which have proved highly beneficial ; and I hope that the good effect they produce will encourage their adoption in all countries. One great subject of regret, however, remains, that the nature of man is not sufficiently understood, and that in consequence, many modifications of treatment, which individual malefactors require, are entirely overlooked.

Formerly, malefactors of all kinds, young and old, persons seduced by strong temptation into crimes, even those who were only accused and detained on suspicion, and inveterate villains, were shut up together. In many prisons they were idle, or if they had some occupation they were generally unprofitable, sometimes too easy, at other times too hard, often dirty and unwholesome; and because punishment, and not reform, was the principal motive of confining prisoners, they were treated with neglect. Their food was not sufficient, and sometimes noxious. Prisons were sometimes erected in damp and unwholesome situations. The prisoners were, on account of ill treatment, affected with various cutaneous and scrophulous diseases, with blindness, dysentary, consumption, typhus, &c. Such aggravations of punishment were too severe, and against the intention of the law.

This error has been felt, but in our days men are falling into an opposite extreme. In many prisons there is too much comfort, and not punishment enough. Here and there they become houses of reward. They perhaps appear still uncomfortable to the rich adminstrators, but they afford more comfort than the greater number of criminals are accustomed to. The prisoners are clothed, secured against the inclemency of the weather, have a good bed to rest on, and are better nourished than at home. Some persons, in-

deed, commit faults in order to be taken into them. Such prisons fail to effect their purpose. To be confined in a prison, ought always to be a disagreeable situation in one way or another. A proper arrangement would be, to have in each prison a variety of apartments, affording different degrees of comfort and accommodation, and to put every atrocious criminal into the lowest first, and let him rise to the higher as his moral improvement proceeded. This would be a practical illustration of the great natural truth, That a state of vice is one of misery, and a state of morality one of comfort and enjoyment. Prisons constructed on such principles would no doubt require to be extensive; and they would, in their first erection, be expensive. But whether would a nation derive greater ultimate advantage from a sufficient number of such establishments, to correct and restrain the vicious part of her population, or from a victory in a war about a sugar island? And the sums consumed by the nations of Europe in prosecuting quarrels which have no natural foundation, and in inflicting misery on each other, would have placed a penitentiary in every department of every kingdom! Such are the results of the dominion of the animal over the man in human affairs.

There are still other causes which prevent the correction of prisoners. Prisoners are taken in ignorant, idle, poor, and disorderly, and are dis-

missed in the same state, or perhaps more instructed in vice. Being together, they are induced to converse ; and even where this is prohibited when at work, they take advantage of every moment, when the overseer is absent, to do so, or they find in the yard an opportunity of becoming acquainted with their companions. They tell each other their crimes and tricks ; and every new comer, especially if his natural dispositions harmonize with that kind of instruction, profits by such lessons, and his corruption is soon complete. In a short time the novice is accustomed to live intimately with the outcasts of mankind, becomes one of themselves, and then all shame and bashfulness disappear. In this manner, according to the saying of the criminals themselves, prisons are schools where all sorts of vices are taught. The malefactors become friends, and form projects, to be executed when they are liberated ; they organize bands, and prepare to pursue with greater audacity their former criminal life.

The greater number of malefactors who are liberated, are incapable of gaining their livelihood. Their immoral habits, their idleness, and even sometimes their intemperance, have been increased during their confinement, and nothing can be more natural, than that they should yield again to their animal dispositions. Nay, some are forced to continue their depraved manner of living, to escape dying of hunger. This, for instance, is the case

with those who are branded, and publicly dishonered. Who will give employment to such individuals? Who will work with them in the same shop? If it seem necessary to brand, in order to know whether a criminal has already committed a crime, let it be done where the mark may easily be concealed.

Another manner of treating prisoners, without correcting them, and which is very illiberal towards neighbouring countries, is that of sending all malefactors over the boundaries. Such a course of proceeding should be only permitted in cases of political errors. In other cases, it is saying to a malefactor, Do not steal in my house, but go to my neighbour's, and do what you please.

The common way of treating criminals gives rise to another injustice against society. According to the common mode of conducting jails, those who, by their criminal actions, disturb the general peace, live at the expense of the quiet and honest citizens. It is indeed shameful, that malefactors, who are commonly stout fellows, and in the best years of their lives, should not gain the necessary means of subsistence, while manufacturers get immensely rich by the employment of other people.

Thus, it is high time to rectify such abuses. The aim of all prisons for malefactors, who are to be sent back into society, ought to be only one and the same, viz. *correction*. But, then, in order to change the houses of Perversion, which all common prisons are, into houses of Correction, other regulations must be put into execution, and the prisoners should be kept till, in all probability, they are corrected.

I repeat that these ideas are not new, but they must be repeated till they are practised every where. First, then, let the causes which produce offences and crimes be removed. Ignorant people who are taken up, should receive instruction, and their attention should particularly be directed to their duty in society. They must be treated as grown up children whose education has been neglected. It will be more difficult to change their habits than those of children, but they are more capable of feeling the difference of motives, and their will may exercise a greater influence on their actions.

Solitary confinement is one of the most effectual means of improvement. Let it not be said that the punishment is too hard and may derange the mental dispositions of some criminals. This will be exceedingly rare but it will correct the greater number of them. Let the directors of prisons be competent judges of human perversity, and let

them be allowed to modify the severity of punishment according to the individual characters of criminals. Let even the committee of overseers attend to this regulation, and give relief, if necessary.

Idleness ought not on any account to be tolerated in prisons. Those who know a trade, may continue to exercise it ; and those who do not know, may learn one. The better heads may superintend the inferior, and become their masters and teachers. Every prisoner should be compelled to work to pay his expenses. If they gain more than is necessary to supply their wants, and if they have placed their fellow creatures in misery, those, for instance, who have stolen or destroyed the whole property of a family, ought to be obliged to indemnify them as far as possible. Moses ordered the thieves to be slaves for a certain period of indemnity. Others, who gain above their personal wants, may be allowed to turn it to the profit of their family, or may put it aside to receive it at their exit. Prisons should be open to the gratuitous inspection and superintendance of intelligent and benevolent individuals of the community, or if such cannot be found, the prisoners might work to pay inspectors. The confinement should las till the occasional causes which gave rise to the offence are removed, and till amendment is probable ; and on being released, the prisoners are, for a certain time, to be observed by the inspectors or the police. If each large town were divided into

districts, and several of the respectable inhabitants of each district would act as inspectors, and visit the released prisoners who come to settle in it, they might save many from relapsing into crime.

The system of confining prisoners indefinitely till corrected, certainly supposes perfect justice in the management of the jails; otherwise persons might be detained in prison from improper motives, and much longer than necessary for amendment. Such an abuse ought to be most carefully guarded against; and, perhaps, the best of all checks to its existence, might be found in the system of open and gratuitous inspection by benevolent individuals above recommended. The public could never conspire to do injustice to an individual; and while his confinement was continued under their eye, there would be very little chance of its being unjustly and unnecessarily prolonged. Or, the period of confinement might be mentioned in the sentence, leaving power to the inspectors, or some properly constituted authorities, to shorten it on proofs of amendment.

The efficacy of prisons established according to sound principles, is no longer speculative. PENN first showed it in a practical way at Philadelphia. Several States in America, and several governments in Europe have followed his example, and the result has perfectly answered their expectations. Relapses of malefactors dismissed from

prisons and common houses of correction are usual, while in the houses of correction, conducted according to the new plan, a small number are confined a second time, particularly when they are kept for some time.

The new method of treating criminals is advantageous also in other respects to society. The prisoners gain more than they consume, and being corrected, they no longer injure orderly, nor seduce innocent persons.

I cannot help mentioning a singular idea which prevails in different places, where means of public education are provided for, but where masters shall be required, subject to a committee, to expel from school any pupil who shall manifest an habitual and determined neglect of his duties.

This advise does not seem to be conformable to Christianity. Jesus did not come to call the righteous, but the sinners to repentance. The parable of the prodigal son, too, is given in a quite opposite spirit. I think that such individuals should be particularly taken care of and not let loose upon society and exposed to all sorts of criminal temptations. Might they not be confined to a house of reform and accustomed to regular habits? The house of reform of Juvenile delinquents at Boston, in the hands of the Rev. Mr. Wells furnishes a convincing proof, what may be done with

such young offenders. Blessed be those who save their fellow creatures from the precipice of perdition, and turn them to the path of righteousness.

It is important to understand human nature, and the modified characters of the malefactors, in order to treat them properly, because every measure which the natural constitution of each individual renders available to produce amendment may require to be employed. A knowledge of this kind will confirm and render still more useful the practical views of several intelligent benefactors of mankind. The reader may consult JOHN HOWARD on Prisons and Houses of Correction ; the work on the Prisons of Philadelphia, by a European (Duke of LIANCOURT ;) Théorie des Paines et des Recompenses, par JEREMIE BENTHAM ; An inquiry, whether Crime and Misery are produced or prevented by our present system of Prison-discipline, by THOM. BUXTON ; the Annual Reports of the Board of Managers of the Prison-discipline Society in America, &c. ; and he will find in Phrenology, a most satisfactory theory to explain and to direct the farther application of the practical maxims of these and other authors.

Treatment of Incorrigible Offenders.

I come to the third point of penal legislation, viz. that which has for its aim to secure society

against incorrigible individuals. I shall not enter into the vain discussions on the right of society to inflict capital punishment. I take it for granted, that society is entitled to cut off one of its limbs for the sake of the happiness of the rest, if there be no better means of securing that end; but death, as the last evil, ought not to be inflicted till all other means have proved ineffectual.

Some crimes are punished with death, in order to prevent their repetition. All judicious writers, however, speak with regret of the frequency of capital punishment, and deny that it has this particular effect. Death is not equally frightful to every one. Criminal legislators judge of others according to their own feelings; they fear death, hence they think that all men do the same. Experience, however, shows that to many persons death, when contemplated at a distance and as a contingency, is not appalling. Nay, by some, even the immediate infliction of it appears to be regarded as a small evil. The unfortunate wish for it, in order to be delivered from their pains. Those in despair destroy themselves, and many become the martyrs of ambition and religion. The laws, themselves, suppose that the loss of life is little in the eyes of many criminals, for means are taken to prevent them from putting an end to their days, which they would do rather than be confined for life. It is certain, that many criminals are not at all moved by the sen-

tence of death, and that they go to the gallows with perfect calmness and resignation. Inveterate criminals commonly say, Dying is nothing, we must finish in that way.

It appears to me, that there is no harm in delivering society from villains, particularly from those who are dangerous to the existence of others. A tree that brings forth no fruit, is cut down and burnt; a furious animal is killed; and a dangerous fellow may, on the same principle, be extirpated. Yet I am also of opinion, that capital punishment might be abolished, and replaced by other means which would be more effectual to protect society. There is an inconsistency in the present practice of inflicting death as a punishment for a great variety of offences; for certainly crimes differing greatly in atrocity do not merit exactly the same retribution. If it be true that crimes must be judged of according to the perversity of the malefactor, and according to the mischief which results from the offence; and if it be established as an axiom, that a crime consists in the intention and not in the action; all crimes which are at present capitally punished, cannot be considered as equal in guilt. A man who intentionally kills his benefactor, or another who kills one who has excited his jealousy and disturbed the peace of his family; an inexperienced girl who, in a moment of despair, destroys her offspring, the cause of her misery for life; the horrid monster who strangles

an old father to enjoy his inheritance the sooner; the prostitute who assassinates the companions of her debauchery; and the highwayman whose whole life is only a succession of robberies and murders, who spreads desolation and devastation in whole districts, cannot be considered as equally guilty. Either, therefore, the minor offences should be visited with a less punishment than death, or, to preserve consistency, the greater offences should be followed by death aggravated by increased horrors; a proposition at which even the sanguinary spirit of legislation would revolt. But as it is said, that death is the ultimate extent of judicial authority over malefactors, and that every punishment beyond it is cruelty, it ought not to be inflicted on individuals who might be prevented from doing evil by other means, such as confinement and education; nor on those equally, who are guilty in very different degrees, particularly since it does not prevent others from committing similar offences.

If the proper means of education and correction were employed according to the law of nature, the injustice in criminal legislation, now mentioned, might be avoided; and, indeed, there would soon be no occasion for capital punishment at all. There ought to be a particular establishment for those who are confined for life, regulated by sound principles. It may be found necessary to treat

some with severity, yet by far the greater number will be kept in order by less severity.

The idea of punishment is closely connected with that of the different degrees of guilt. If the reformation of malefactors were the principal object of the penal code, the possibility and means of correction would be the first object to be considered, and the extent of the guilt only the second. Punishment would then be viewed as one of the means of correction, but all the others would likewise be examined and employed. The greater the villain, the more care would be taken to correct him. At the same time, it is natural to consider the different degrees of guilt. On this point, many ideas may be communicated which are not adequately understood by legislators, because they are not sufficiently acquainted with human nature.

It is scarcely possible for human intelligence to decide with perfect justice, in regard to the precise extent of guilt and innocence in every particular case. All the motives and causes which have determined a malefactor to commit a crime, cannot be known by man, and without such a knowledge, it is impossible to form a perfectly just estimate of the exact degree of guilt. Such a judgment must be remitted to Him alone, who is all-wise. Although, however, human wisdom has limits, it must extend itself as far as possible.

In penal legislation, extenuating and aggravating motives are admitted; and indeed some individuals, the fatuous and insane, are not held as answerable at all for their actions. In other cases, actions may be clearly illegal, which nevertheless admit of extenuating motives. I shall speak of several grounds of extenuation which appear to me to be founded in nature, but which nevertheless are not considered as such in different countries.

ON ILLEGAL ACTIONS WITHOUT GUILT.

The first condition upon which a man is answerable for his actions, is that he is free. Here I take it for granted, that my ideas on moral liberty, such as they are developed in The Philosophical Principles, Part. II. of Phrenology, are known to the reader. Whenever moral liberty is wanting, there is no guilt. This is the case at those periods of life when the human faculties have not acquired strength enough to exercise will, viz. in infancy, or when the influence of will is suppressed by the state of disease. In all countries, a certain age is fixed when punishment may be inflicted. It is also admitted, that the diseased state of the manifestations of the mind excludes culpability; but the extent and appearances of this state are not sufficiently understood

I.—*Illegal actions of Idiots.*

Idiocy is Complete or Partial: Instances of the former kind are rare; of the latter numerous. Complete idiotism is easily distinguished, and does not require a detailed elucidation; but the common manner of judging of incomplete idiotism is frequently very erroneous. Legislators and judges are not yet convinced that there are *various* faculties of the mind, and that the manifestations of each power depend on a particular part of the brain; that one or several organs may be very active, while others are in a state of idiotism. These facts, however, which, although not generally admitted, are true, explain why, in some individuals, the perceptive faculties and the inferior propensities may be very active, while the powers of the moral will are silent. Such individuals are like animals, and cannot be moved by moral motives. They act only according to the feelings which they possess, without being able to choose between motives. PINEL speaks of an idiot who had the most determinate inclination to imitate the voice and gesture of all persons around her. It is observed, says FODERE, "That by an inexplicable particularity several cretins, endowed with so little intelligence, are born with a particular talent for drawing, musical composition, rhyming, &c. I have seen," continues he, "several of them, who learned, by themselves, to play

pretty well on the organ or harpsichord; others, without having had any master, knew how to mend watches and to make various mechanical instruments. This phenomenon probably results from the more perfect organization of the organ on which such or such an art depends, and not at all from the understanding. For, these individuals do not know how to read books which treat of the principles of the respective arts; they are even disturbed at being desired to learn the principles." (Traté du Goître et du Cretinisme. Paris, 1800, p. 133.)

I have mentioned many cases in my work *on Insanity* (p. 120—133.;) and in that on Phrenology, where I speak of destructiveness and acquisitiveness. Idiots, although mischievous, are not objects of punishment, yet it is rash to say, that all means of correction are useless. They ought, at all events, to be prevented from doing harm to others; and as they cannot be left to themselves, there ought to be houses of security for such unfortunate individuals.

There are cases, in which it is extremely difficult to decide whether there is or is not will. "Persons," says Dr. Rush, (Diseases of the Mind, p. 268.) "who are inordinately devoted to the use of ardent spirits, are irreclaimable by all the considerations which domestic obligations, friendship, reputation, property, and sometimes even by those

which religion and the love of life can suggest to them. An habitual drunkard, when strongly urged by one of his friends to leave off drinking, said, Were a keg of rum in one corner of a room, and were a cannon constantly discharging balls between me and it, I would not refrain from passing before that cannon, in order to get at the rum.

"There are many instances," continues Dr. Rush, "of persons of sound understanding, and some of uncommon talents who are affected with the lying disease. Persons thus diseased, can neither speak the truth upon any subject, nor tell the same story twice in the same way, nor describe any thing as it has appeared to other people. Their falsehoods are seldom calculated to injure any body but themselves, being, for the most part, of an hyperbolical or boasting nature, and not injurious to the characters and property of others. That it is a corporeal disease I infer from its sometimes appearing in mad people, who are remarkable for veracity in the healthy state of their minds, several instances of which I have known in the Pennsylvanian hospital. Persons affected with this disease, are often amiable in their tempers and manners, and sometimes benevolent and charitable in their dispositions. Lying, as a vice, is said to be incurable. The same thing may be said of it as a disease when it appears in adult life."

The time will come when several malefactors will be declared insane, who are now punished. The only difference, however, will perhaps be in the aim of their confinement, viz. they will be shut up, in order to be prevented from doing mischief, instead of being shut up with the view of making atonement to justice. The laws of Nature are severe, but they are just. General order must never be allowed to suffer for the sake of one or several individuals. Even these persons, however, must, as much as possible, be allowed to enjoy their natural rights. In a prison at Berlin (Stadtvogtey,) we found a boy of an unfortunate cerebral organization ; the forehead was low and narrow, depressed immediately above the eyebrows, much hollowed sidewards above the eyes, but large and prominent at the temples. His countenance indicated slyness and malice. Dr. GALL said, that such individuals should not be left at liberty, but ought to be kept in an establishment for security. The registers, when referred to, proved that the boy, from infancy, had shown the most obstinate propensity to steal. Such individuals, indeed, become more incurable upon every relapse. In such cases, all means of correction should be tried first, and if these are found fruitless, it should then be declared lawful to detain them for life, but to treat them with humanity. They ought to be considered as persons affected with a disease, pregnant with danger to society. In general, nothing but amendment of

conduct should entitle malefactors to return to the society which they have disturbed.

Intellectual idiotism is commonly understood, but there is also a moral idiotism. Some individuals may possess intellect and strong animal feelings, but very weak moral sentiments which seldom, if ever, enter into activity, so that such persons constantly follow their animal propensities. They are deprived of sufficient moral motives and cannot be considered as accountable beings. Society has no other right but that of preventing them from disturbing others.

II.—*Illegal actions of Madmen.*

Madness is every where allowed to take away guilt, but its nature is not sufficiently understood. The most important points to be attended to are, that it may be general or partial; that the feelings as well as the intellectual faculties may be deranged, and that general and partial insanity may be continual or intermittent. General and continual madness is easily distinguished, but partial and intermittent insanity is less known than it ought to be.

My ideas on these points are detailed in my work on Insanity, and I refer to it for a fuller development of the subject. Individuals under the involuntary influence of these faculties through

disease, are to be treated as patients and cured, not as criminals to be punished.

ON ILLEGAL ACTIONS WHICH ADMIT OF EXTENUATING MOTIVES.

It is impossible to weigh exactly the motives which may produce illegal actions. In examining whether an action be just or unjust, we commonly think only whether it is conformable to the law or against it. Yet, as long as legislation intends to punish, the degree of guilt attributable to the individual cannot be entirely overlooked; for otherwise, an idiot who assassinates would be liable to the punishment of a sane person; in short, extenuating motives would not in any case be admitted.

Violent passions and affections, such as anger, fury, jealousy, rage, &c. are considered as a transient madness, and are justly admitted as extenuating motives. But it ought to be known, that some persons may feel internally an excessive excitement of these affections, who restrain the outward expressions of them; nay, that such persons sometimes suffer even more than those who manifest their anger externally, and who tear their hair or stamp with the feet, &c. Shame, despair, and many secret affections darken the spirit of man, as much as sudden and violent passions; and

they derange equally the state of health and the judgment.

Moreover, the same exciting cause will act violently on one person, and scarcely make an impression on another, according to their natural constitutions. Certain kinds of food, principally liquors, excite differently the individual dispositions of different persons. Wine or brandy renders one courageous and quarrelsome, another eloquent, sincere, amorous, sorry, gay, &c. The highwayman, PETER PETRI, a companion of SCHINDERHANNES, seemed to be insensible in his common state ; but when he had taken several glasses of brandy, he behaved like a tiger, and attacked friends and enemies indiscriminately. We know the history of a woman who, after drinking some glasses of brandy, felt a strong involuntary desire to become an incendiary. Illegal actions done during drunkenness, at least the first time, should find in it an extenuating motive. The guilt is greater, if the effect of spirituous liquors be known, and if they be not avoided.

The most intricate situation, with respect to extenuating motives, is when one faculty in particular is extremely active in individuals. This may happen with regard to every power. If it be the case with a superior faculty, such as benevolence or reverence, the individual may be said to be fortunate. Yet, in the same way, every other feeling,

for instance, an insatiable desire of glory, may govern the whole conduct of some persons; and again, every animal propensity may become excessively active. This state is not insanity; the individuals are able to distinguish the influence which excites them, and have power to restrain it, and are therefore answerable for their actions; but their situation is an unfortunate one; for they are called upon to maintain a dreadful struggle with their ruling propensity. I know of a family in which the desire to drink liquors is hereditary; the grandfather and the father have killed themselves by hard drinking, the grandchild, when only five years of age, manifested the same inclination. There are similar examples with respect to acquisitiveness and destructiveness. The question, then, is, Whether and how far the innate dispositions, when in this manner excessively strong, are to be considered as extenuating motives? At all events, it is certain, that not only violent and sudden affections, but also various other excitements ought to be considered as extenuating; and I have no doubt that they will be admitted by degrees, as they are understood.

Let us examine a few examples, among the infinite number which might be quoted. A first lieutenant was inspired with a passion for the wife of a private in his company. This virtuous woman steadily refused his propositions and importunities, without saying a word of it to her

husband. One day, at exercise, the lieutenant treated the husband very ill, and ordered him several times to be bastinadoed. As the husband complained, he was treated as stubborn and mutinous, and forced to be silent by fifteen other blows. His unfortunate wife told him the intention of the lieutenant. From Thursday to Sunday he meditated and projected the death of his wife and his children. He admonished his wife to confess, and to go to the communion table. He did the same. He was always mild, a good father, and an excellent husband, but during these days he excelled in these qualities. On Sunday, after dinner, he proposed to his wife to take a walk with him. He conducted her under the sallow-trees, planted along the glacis of the citadel at Breslaw, and, whilst caressing her most tenderly, he pierced her heart with a dagger. He went back in haste, that he might not be prevented from sending his two children into heaven. He hoped to find in them intercessors before God. He killed them with a little axe; placed them on the bed, their arms crossed; went then directly to the guard, with a countenance of satisfaction, and told what he had done. "Now," added he, "may the Lieutenant of *** make love to my wife. She and her children are secured against seduction and dishonor. They will be obliged to me for their happiness, and pray for me in heaven." The court-martial, at Breslaw in Silesia, did not think of extenuating motives, but even aggravated

his punishment, by depriving him in prison, and at the moment of execution, of the presence of a clergyman who might encourage and prepare him for death.

The work of CRICHTON on Insanity contains several examples of this kind. "CATHARINE HANSLERIN, forty-five years old, was an inhabitant of Donauworth. She had been twelve years married to a man of a severe and unfeeling temper, and, excepting a fever, and some slight causes of indisposition, was a tolerably healthy woman. About the end of the year 1785, she was detected in stealing milk in the village where she lived. She solicited, in the most earnest manner, that the circumstance might be concealed from her husband, whom she dreaded. It was promised, but not observed. At first, he was told of it in an obscure way, but he afterwards discovered the whole truth.

"The detection of her fraud made a deep impression on her mind, not only on account of her good name, but also on account of the treatment she was likely to receive from her husband. In consequence of this, she became low in spirits, and melancholy. She had confessed, but it did not relieve her mind. She prayed often, without knowing what she said. She had been frequently seized with violent headaches, during which she was not conscious of what she did.

"Her husband, when he heard of her stealing, beat her severely. After this ill-treatment, she went to bed, trembling for fear, and dreading worse usage the next day. Her daughter, a little girl seven years old, came to her bedside, and prayed with her. She had formed the resolution of leaving her husband, and asked her daughter, if she would stay with her father? This the girl refused to do, as she was afraid of him. After praying devoutly, early in the morning she left her husband's house, and took her daughter along with her, and also her infant, that was only two months and a half old. As she was about to depart, she again asked her daughter if she would not rather live with her father? The girl answered she would rather die. The thoughts which this answer occasioned in the mother's mind, the misery and distress which surrounded her, the fear of what might happen to her children in case she died, and, at the same time, her own ardent wish to finish her existence, all these thoughts caused her to form the barbarous resolution of drowning them.

"The infant she took in her arms, and being arrived at the banks of the Danube, she caused her daughter to kneel down and pray to God to deserve a good death. She then tied the infant in the arms of the girl, blessed them by making the sign of the cross on them, and threw both into the river. She afterwards returned to

the village, told what she had done, and was executed."

"A young woman, twenty-three years of age, was sent to the house of correction at Onolbach, 1755. She was received with blows and stripes. This treatment made so deep an impression on her mind, that she began to detest life, and in order to get rid of it, determined to commit murder. She thought that by so doing, she would have time allowed her for repentance, which she knew she could not have, were she to destroy herself. She premeditated her design in cold blood, and accomplished it on another woman in the following manner.

"One Sunday she complained of being ill, and requested to be excused from attending Divine service. A simple, and half fatuous girl was allowed to attend her. She convinced this girl that there was no hope of their being relieved from their present miserable situation, but by their both consenting to die, and she proposed to the girl to kill her first. The girl was soon reconciled to the proposition, and the only condition she made was, that her companion should not hurt her. She stretched herself out, and the murderess accomplished the horrid crime by cutting the girl's throat.

"Upon being asked, in the court of justice, what could have induced her to commit so horrid a deed, as the murder of her fellow-prisoner ? she answered, Fear of the sharp blows and pain she knew she had to sustain in the house of correction. She thought within herself, If I take away my own life, my soul is lost for ever ; but if I murder another, though in that case I also must forfeit my life, still I shall have time to repent, and God will pardon me. When she was asked, Whether she had no hatred against the deceased, or if she had ever received any ill-usage from her ? she answered, That the deceased had never done her any injury, and if any thing vexed the deceased, she always came to her to make her complaints. Upon being asked, if she slept well after having committed so horrid an act ? she answered, That she prayed to God before going to bed, and slept well, and when she awoke, she again prayed. She seemed perfectly calm and collected during her trial, until it was explained to her, that she had drawn down the eternal wrath of God upon herself. Then she wept bitterly. The physician ascribed the crime to despair, and *tædium vitæ ;* but the law would not understand the hint."

There is a similar fact mentioned in the journal which is published at Leipzig, under the title *Zeitung fur die elegante Welt*, (N. 92. 1st. Aug. 1805.) Amongst a great number of malefactors confined in the prison of Torgaw, and presented

to Dr. GALL, there was a woman who had drowned her child, a boy of four years old. Dr. GALL examined her head, then took the hand of Professor LODER, who was present, and put it upon the organ of Philoprogenitiveness, that he might examine its size. When the prisoner had retired, GALL said that that organ was great in this woman, the organ of Murder (as it was then called) small, and that, in general, her head was well organized. He desired to be informed of her character and capacities, principally with respect to her crime. The magistrate said that this person was born of poor parents, whom she had lost early, and that she had received no education. When grown up, she became a servant in the village. Every one was satisfied with her conduct and behaviour. Unfortunately she was seduced, and had a child. The being to whom she gave life was the cause of her misery. She was dismissed from service, and no one would receive her on account of her child. For a long time she did not know how to endure her situation. She loved her infant with the most tender affection, though she had reason to detest his existence. Finally, a poor peasant and his wife had pity on her ; they kept the child in their house, and took care of him for three years. The mother found a place, and her behaviour was very exemplary.

The child increased, and gave great satisfaction to the adopting father, who loved him very much.

This was enough for bad tongues to say, that the peasant was his father. Satisfied with his conscious innocence, he despised the wicked imputation, but this was not the case with his wife. To keep peace at home, he was obliged to give the boy back to the mother. She begged her master and mistress in vain to keep her; in vain she represented to them, that she had served with exemplary assiduity and fidelity. She was discharged in the most severe season. All the wealthy peasants treated her with the same severity. She sold whatever she possessed to feed her child and herself. He decayed through cold and misery. In this situation she prayed to Heaven to let both herself and him die. Her maternal affection was overpowered by an internal voice, which said aloud, that the only means of saving them was the destruction of her child. She preferred to see him die suddenly, and in a moment of despair, she carried him to the River Elbe, and precipitated him into the stream. Exhausted, she fainted away, and was found in this situation. As soon as she recovered her senses, she accused herself. During her detention before trial, namely, a whole year, she behaved very well; she manifested distinct and deep repentance of her deed, which, however, she did not consider as a crime. The clergyman, who visited her from time to time, said that she was ignorant, but that she was mild, and very docile. The superintendants gave excellent testimonies of her good conduct. These

different motives determined the Court of Appeals to change the first judgment, according to which she ought to have been beheaded, and they condemned her to confinement for life, without being severely treated. Here she learned to write and to read, and her whole conduct was orderly.

From this narrative of facts, it is evident that her organization was not in contradiction with her manner of feeling and thinking, and that she deserved the benefit of the application of extenuating motives.

There is no illegal action which has greater and juster claims to be treated with equity than child-murder. In various countries penal legislation is too severe in this respect. I am far from excusing a crime when it is voluntary, but I contend also for extenuating motives, whenever they can be admitted. Legislators and judges are commonly more or less severe, according to their own manner of feeling, rather than according to philosophical principles. Several say is it possible to imagine a more barbarous and inhuman action, than that of a mother, deaf to the cries of nature, destroying her child, at the moment when he seeks for aliment from her breast? Others reply, that because infanticide is a crime against nature, and because the hearts of all mothers revolt at the idea of it, it is impossible that it can

be committed except in a moment of derangement, and in a state of delirium.

Infanticide impresses us with the idea of barbarity and atrocity with the greater force, because it seems natural that the love of offspring should prevent such an action. It is true, nature has endowed the greater number of women with this benevolent propensity. But in women, as well as in females of animals, this propensity has different degrees of energy. Certain cows do not suffer their calves to suck; some pigs, cats, rabbits, &c. kill their young, while other females of the same kind of animals cry for several days, and refuse to eat, when they are bereft of their offspring. It is a lamentable truth, that this difference of motherly love exists also in mankind. All women do not desire to become mothers; some consider their pregnancy as the greatest misfortune. Several mothers seek various pretexts, in order to remove their children out of the house. There are others, who being freed from shame, reproach, misery, and many inconveniences, by the loss of their illegitimate children, yet shed tears for a long time after, at the remembrance of them. Others, on the contrary, see their legitimate offspring buried without a pang. Thus it is beyond doubt, that natural love of offspring is very weak in some women. It is therefore wrong to believe that infanticide is a more unnatural act than any other murder.

I have examined thirty-seven child murderers, and in thirty the organ of Philoprogeny was very small. It does not follow that a mother, in whom the organ is small, must necessarily destroy her offspring. My object is only to observe, that this sentiment is not strong in every mother, and that, if females, in whom it is weak, are exposed to various unfortunate circumstances, they are destitute of a great motive to combat the internal sensations which may impel them to this crime.

Almost all laws against infanticide are framed on the supposition, that this crime, when not committed in a fit of rage and hatred, is always premeditated. But is it true that these two are the only affections which exclude premeditation? Different actions of our sex may be cited, in answer to this question. How often does not the sentiment of honor, which is even preposterous, dispose man to hazard his life. Several have destroyed themselves, for having lost a woman they loved. Others despair from disappointed ambition, or from the loss of fortune. Our sex, however, is the strongest; we are seldom destitute of all resources, or deprived of all hope of finding a companion for life. How different is the situation of an unfortunate woman? The intellectual faculties of the female sex are commonly weaker; hence they have less will to resist their stronger sensibility, and stronger affections and passions. Their sentiment of honor and shame is cultivated

from infancy, exercised and exalted; and we require of young, timorous, inexperienced and sensible creatures, when the most dreadful event overwhelms them, to be cool, calm, and reflecting. The complaints of pregnancy, and many terrible thoughts during it, weaken the bodily strength, increase irritability, and disturb the mind. When the critical moment arrives, they are most frequently alone, without consolation, overwhelmed with grief, and weakened; how, then, can we expect that their judgment should be sound? and if such an unhappy mother destroy the feeble existence of her offspring, perhaps in a fit of delirium, how is it possible to confound such an action with the most horrible of crimes?

Moreover, men and women are more irritable at certain periods. In my work on Insanity, I have treated of these periods of irritability in the article on Fits. It coincides with the period of the menses, and their delivery happens at the same time, viz. when the mother would have had the tenth periodical return. Thus it is natural, that at this period the unfortunate woman should feel her situation more strongly, and be more inclined to take a fatal resolution.

Our sex can never be exposed to such a misfortune; and if, as it is the case in certain countries, we, the legislators, think that it is not expedient to require satisfaction from the seducer, and if we

fear to be unjust against perfidy, why do we fear to be indulgent and humane, towards the frail and disappointed female? It is even conceivable, that such an unfortunate mother may continually think of the ingratitude and perfidy of the father of her child; that she may consider how he has deceived her in the most infamous manner; how he is the cause of her ignominy and misery; how he forgets his forfeit, whilst, in some countries, the laws do not afford her any protection against him; and how his stratagems are styled merely love intrigues. May not indignation trouble her understanding, and excite derangement of her mind?

Indeed, if it were not so difficult for a mother to take such a desperate resolution, infanticide, the result of illegitimate pregnancies and of perfidy on the side of seducers, would be much more frequent. Hence it is but just to take into consideration the internal conflict which may have deranged the senses of a child murderess, and to appreciate all extenuating motives. The ideas on infanticide, which Dr. HUNTER has detailed in a letter to the Royal Society of London, deserve the attention of every criminal legislator. I agree that it must be punished as murder, when it is committed with premeditation, with mature reflection, in the complete use of moral liberty, without an urgent provocation, and through mere depravity of morals. In this case, the legislator deserves all thanks for protecting the child who

is without support and defence. But it is important to know how to distinguish the different circumstances which accompany this action, and there can be no doubt that very often infanticide admits of many extenuating motives.

Lying-in hospitals, where every woman with child is taken in and brought to bed, without being obliged to say who she is and whence she came, and foundling hospitals, often prevent infanticide. In countries where such establishments are wanting, child-murder is more frequent than in others where they exist. These institutions, however, tend so much to weaken the motive to moral restraint furnished by the obligation to support and to cherish offspring, that it may be fairly questioned whether the evils they produce in this point of view, are not greater than those they prevent in the other.

In order to prevent child-murder, there is a law in certain countries, which obliges pregnant girls to discover their situation to some accoucheur or midwife. If they do not fulfil this formality, they are supposed to have the intention of committing infanticide. In other countries, the proprietors of houses are answerable for pregnant girls who live in them. They are thus required to know the state of their locatories.

Unfortunately legislators are often in the same situation as physicians who attend incurable diseases. They try uncertain means, rather than do nothing. The law which obliges women to intimate their state of pregnancy, is in contradiction to nature. It is not necessary to mention, that there is no need of such a law with respect to girls of the town. These have lost their bashfulness, and will go to the lying-in hospitals to be delivered. Such a regulation, therefore, must be intended for timorous, bashful, and decent women, who have been seduced. Now, the feeling of honor and bashfulness is considered as the best safeguard of female virtue, and is constantly cherished accordingly; nevertheless, when such a girl falls, she is required, under pain of punishment, to make her shame known. There are men of mature age who, with the greatest reluctance, would confess certain diseases to their most intimate friends. How, then, can the law be so severe on females, for not confessing a circumstance which they are taught to look upon as more disgraceful than any disease? Besides, when we consider that such unfortunate girls are frequently actuated by a strong feeling of the ignominy and misfortune they bring on their family by their misconduct, we ought to recollect, that their obstinacy in concealing their state, may, in truth, be allied more nearly to virtue than to crime.

Thus, if extenuating motives are in any circumstances to be admitted, in no cases will they be more truly applicable than in those of infanticide.

In my work on Insanity, I have shown, that suicide in many cases is the effect of a corporeal disease. It then admits extenuating motives. Criminal legislators, if better acquainted with it than they commonly are, certainly will modify the laws upon the subject. These very rarely are of much efficacy in deterring those who wish to end their days, and are no punishment for them after death ; but it is not a matter of indifference to whole families, to have the stigma of alliance with a malefactor forced upon them, when in fact they have only had the misfortune to be connected with a diseased individual. For details on this subject I refer to my work on Insanity.

CONCLUSION.

The considerations, examined in the Appendix of this work, tend to show, that legislation in every branch ought to have only one aim, viz. the general happiness of mankind, and that of each individual, as far as it is compatible with the former; that penal legislation, in particular, ought to be corrective; that in prisons, the inhabitants of which are to be sent back into society, all possible means of correction should be employed; that capital punishment might be abolished, and the crimes for which it is inflicted prevented, by proper establishments. As punishment, however, is still the object of the penal code, I have treated of the different degrees of guilt which may be implied in criminal actions; and of some illegal actions that admit of extenuating motives, such as suicide and infanticide. From this Appendix, too, it may be inferred, how important and necessary, for legislators and judges, is the study of man.

THE END.

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